FIG. 1

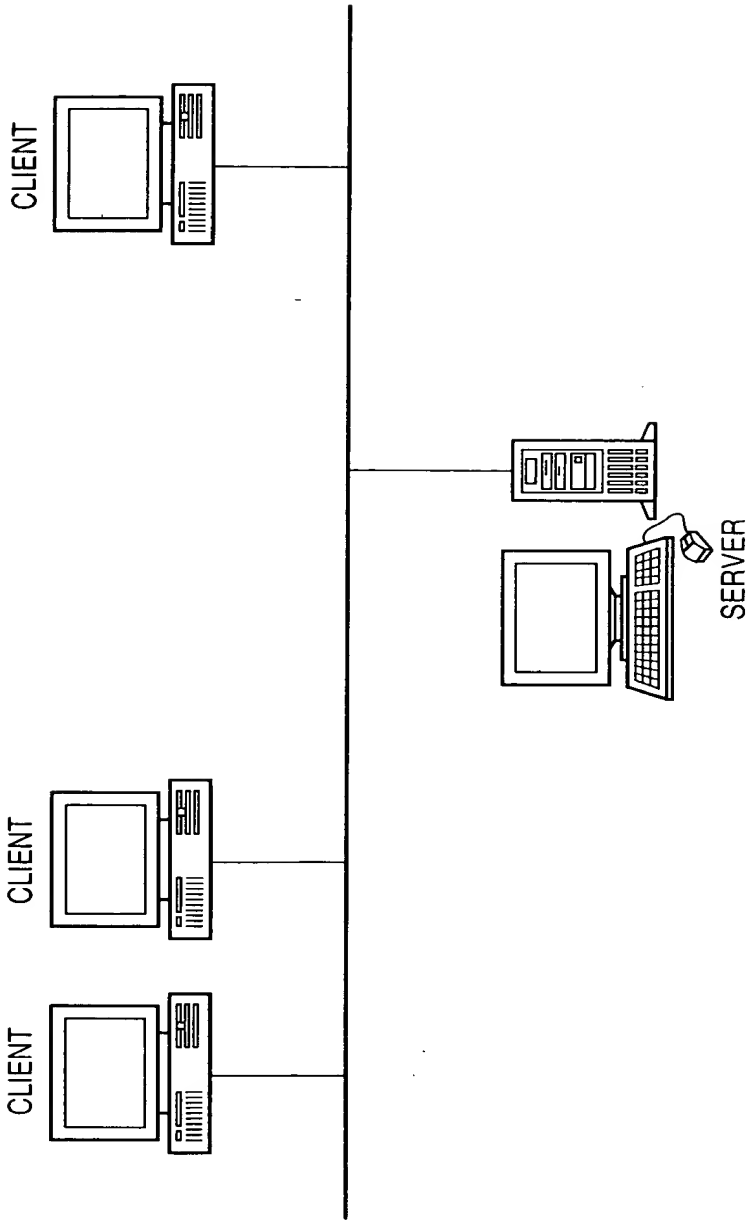


FIG. 2

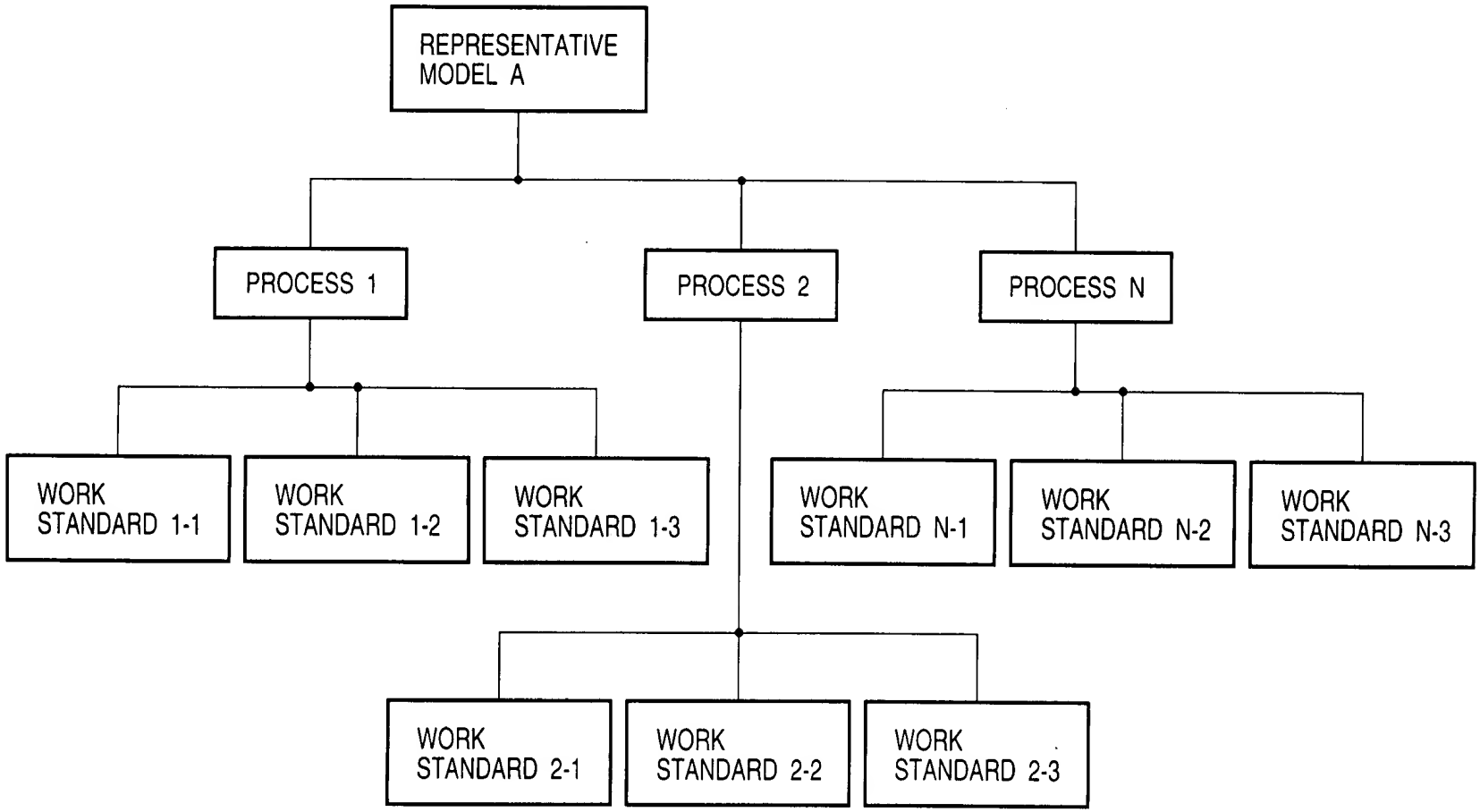


FIG. 3

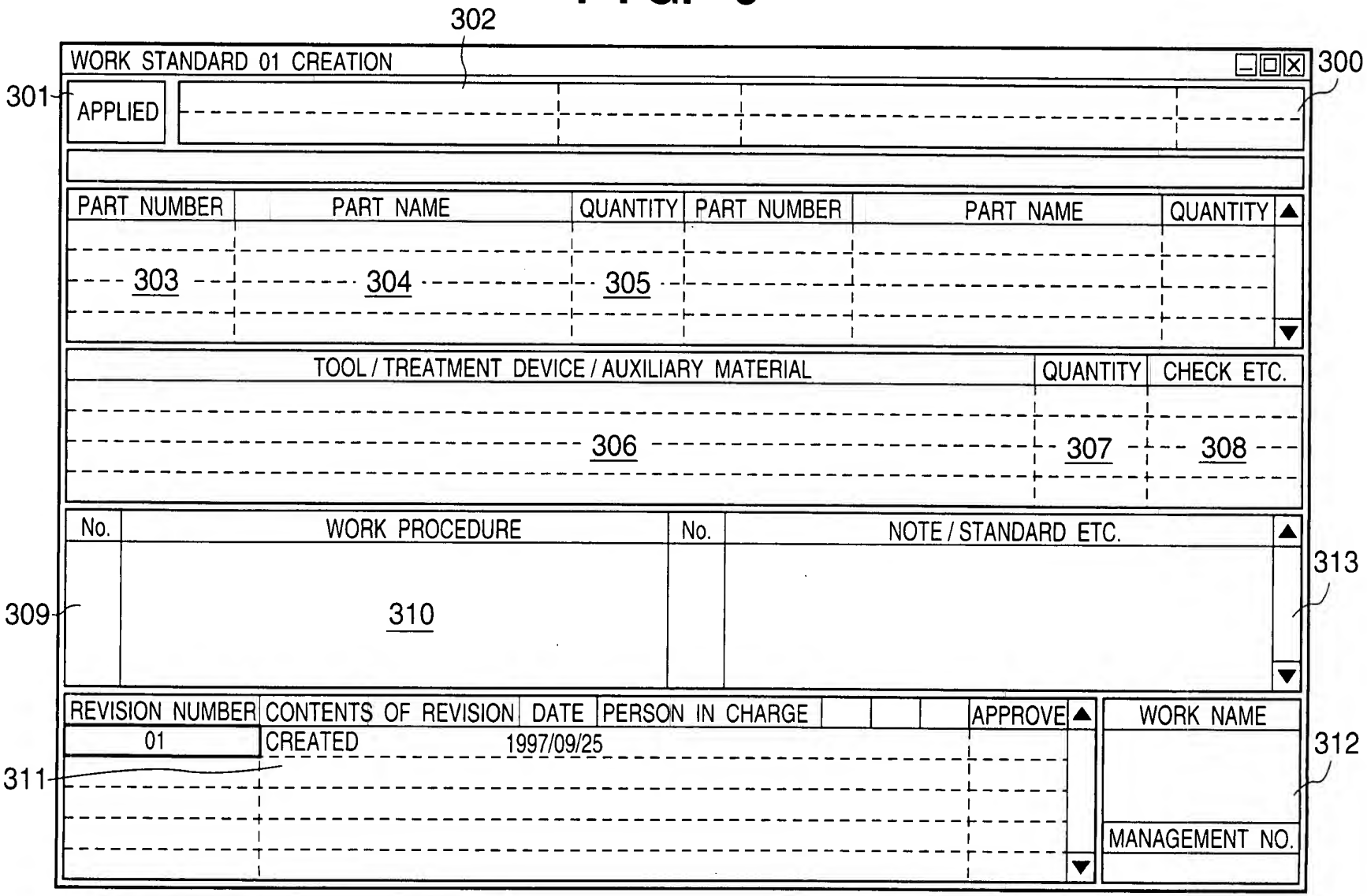

302
WORK STANDARD 01 CREATION
300
301
APPLIED
PART NUMBER
PART NAME
QUANTITY
PART NUMBER
PART NAME
QUANTITY
303
304
305
TOOL / TREATMENT DEVICE / AUXILIARY MATERIAL
QUANTITY
CHECK ETC.
306
307
308
No.
WORK PROCEDURE
No.
NOTE / STANDARD ETC.
313
309
310
REVISION NUMBER
CONTENTS OF REVISION
DATE
PERSON IN CHARGE
APPROVE
01
CREATED
1997/09/25
311
WORK NAME
312
MANAGEMENT NO.

FIG. 4

STRUCTURE OF MASTER FILE

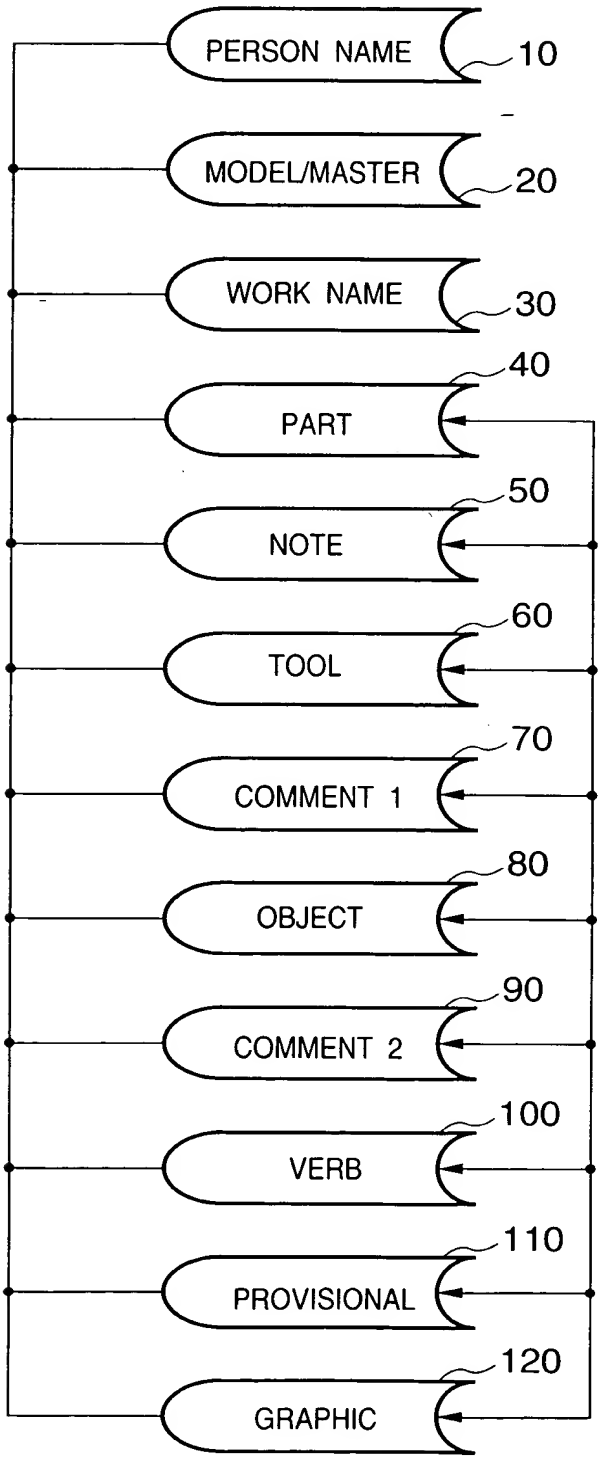


FIG. 5

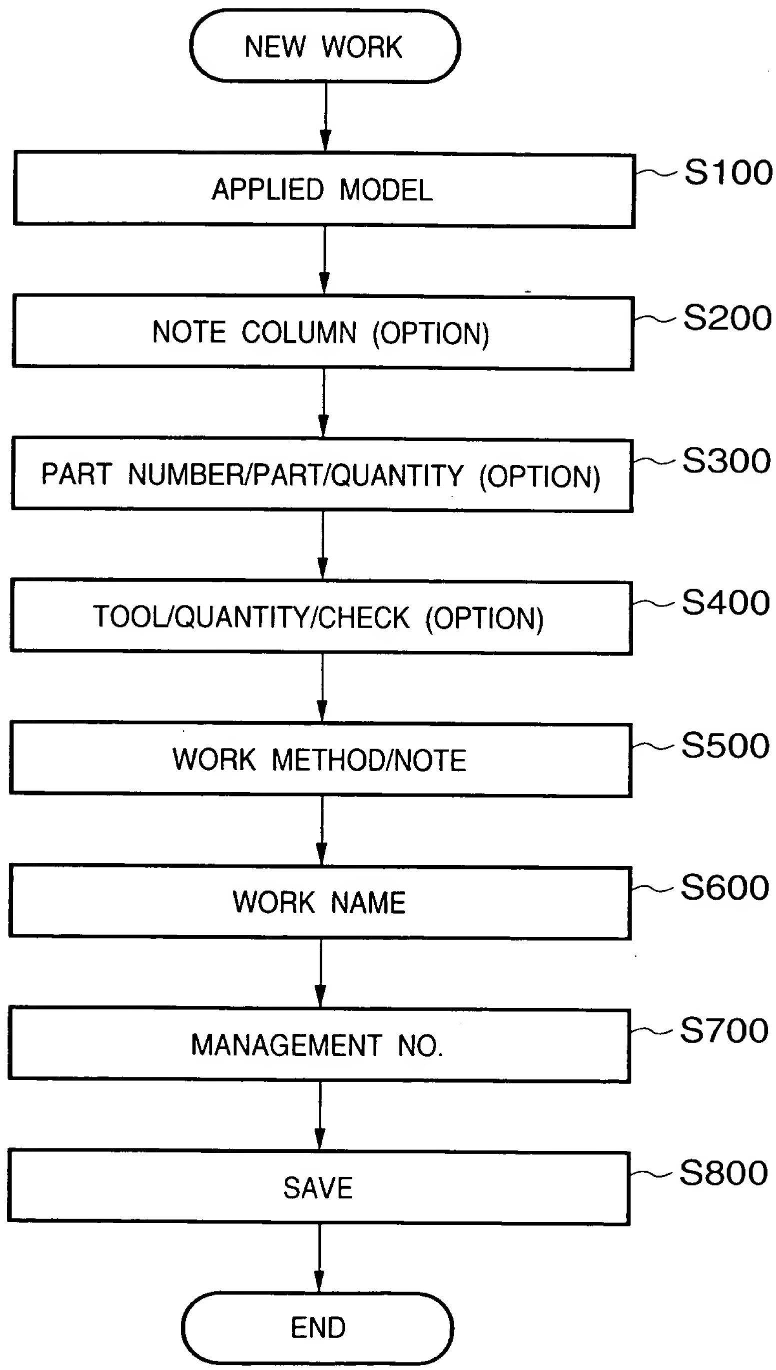

NEW WORK
APPLIED MODEL
S100
NOTE COLUMN (OPTION)
S200
PART NUMBER/PART/QUANTITY (OPTION)
S300
TOOL/QUANTITY/CHECK (OPTION)
S400
WORK METHOD/NOTE
S500
WORK NAME
S600
MANAGEMENT NO.
S700
SAVE
S800
END

FIG. 6

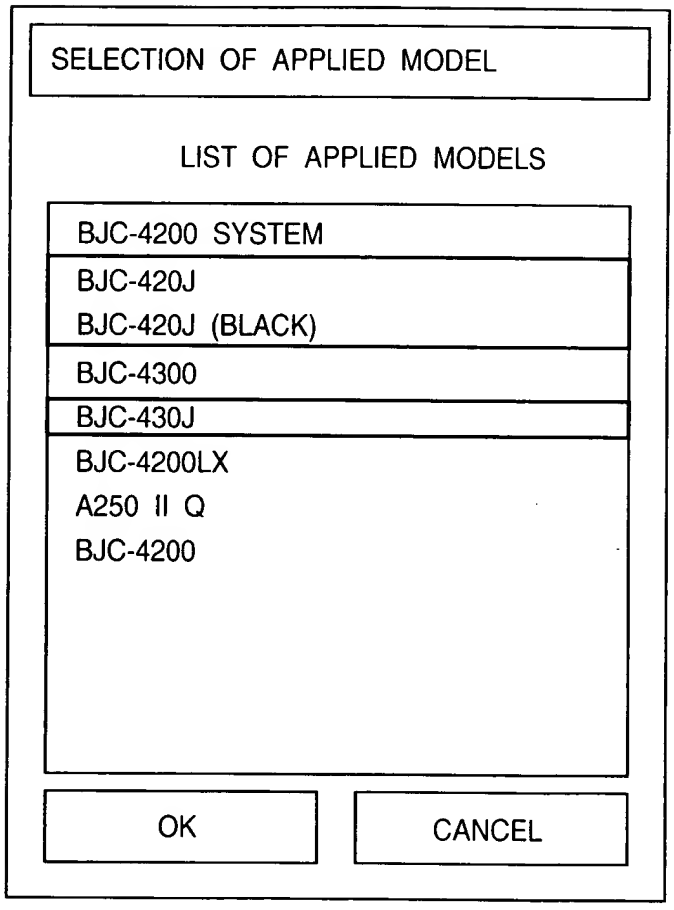


FIG. 7

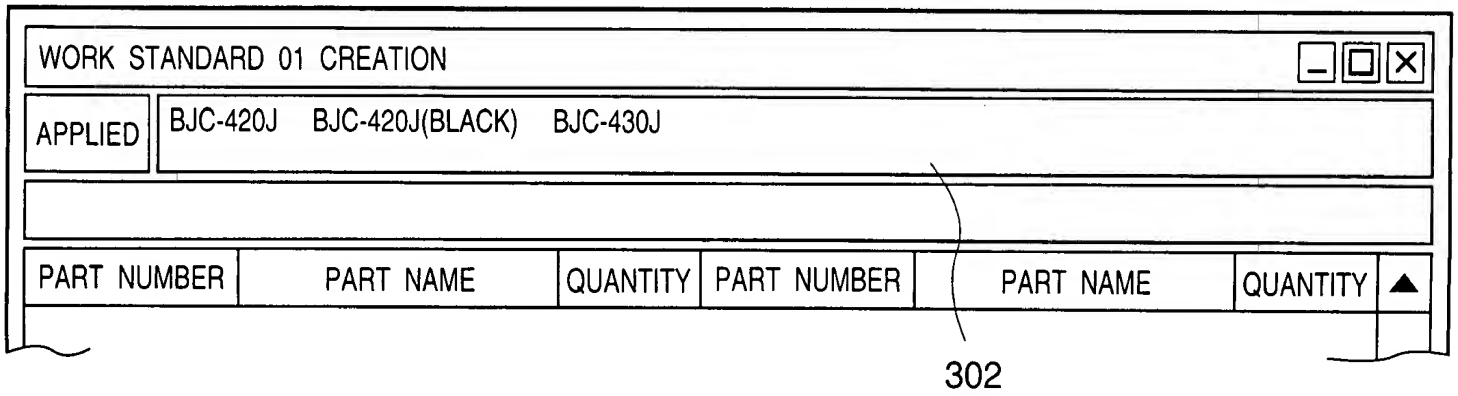
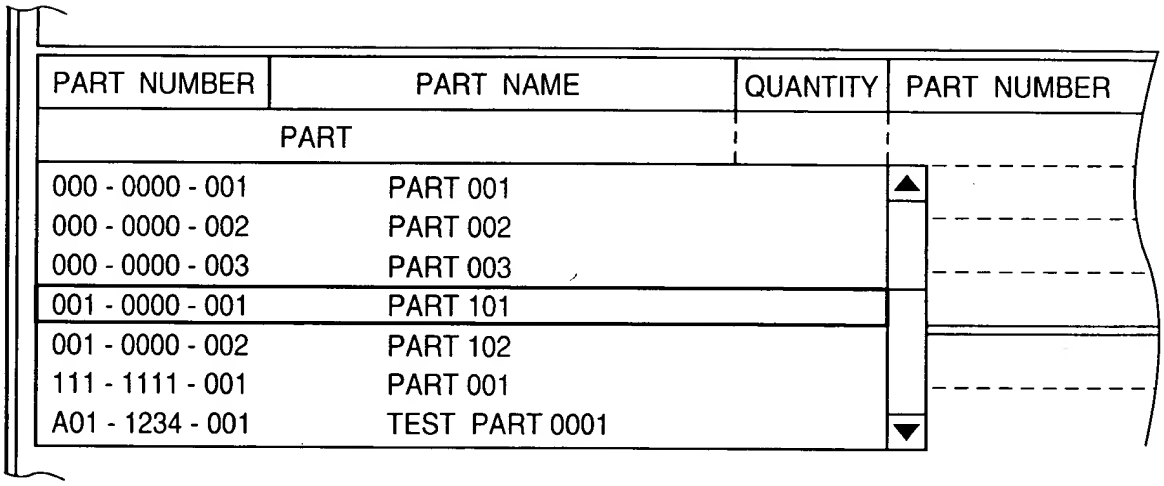

WORK STANDARD 01 CREATION
APPLIED
BJC-420J BJC-420J(BLACK) BJC-430J
PART NUMBER
PART NAME
QUANTITY
PART NUMBER
PART NAME
QUANTITY
302

FIG. 8



PART NUMBER	PART NAME	QUANTITY	PART NUMBER
PART			
000 - 0000 - 001	PART 001		
000 - 0000 - 002	PART 002		
000 - 0000 - 003	PART 003		
001 - 0000 - 001	PART 101		
001 - 0000 - 002	PART 102		
111 - 1111 - 001	PART 001		
A01 - 1234 - 001	TEST PART 0001		

FIG. 9

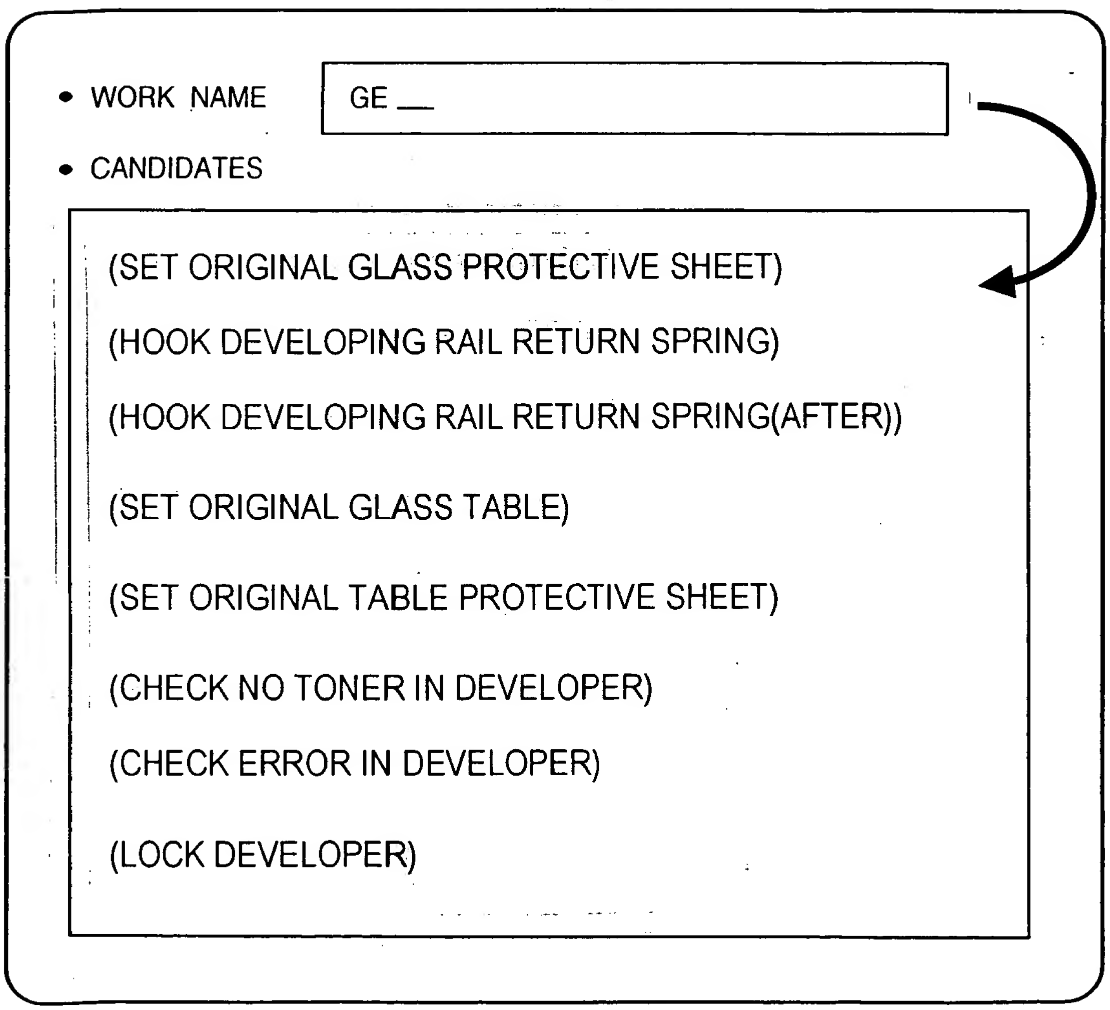

• WORK NAME
GE __
• CANDIDATES
(SET ORIGINAL GLASS PROTECTIVE SHEET)
(HOOK DEVELOPING RAIL RETURN SPRING)
(HOOK DEVELOPING RAIL RETURN SPRING(AFTER))
(SET ORIGINAL GLASS TABLE)
(SET ORIGINAL TABLE PROTECTIVE SHEET)
(CHECK NO TONER IN DEVELOPER)
(CHECK ERROR IN DEVELOPER)
(LOCK DEVELOPER)

FIG. 10

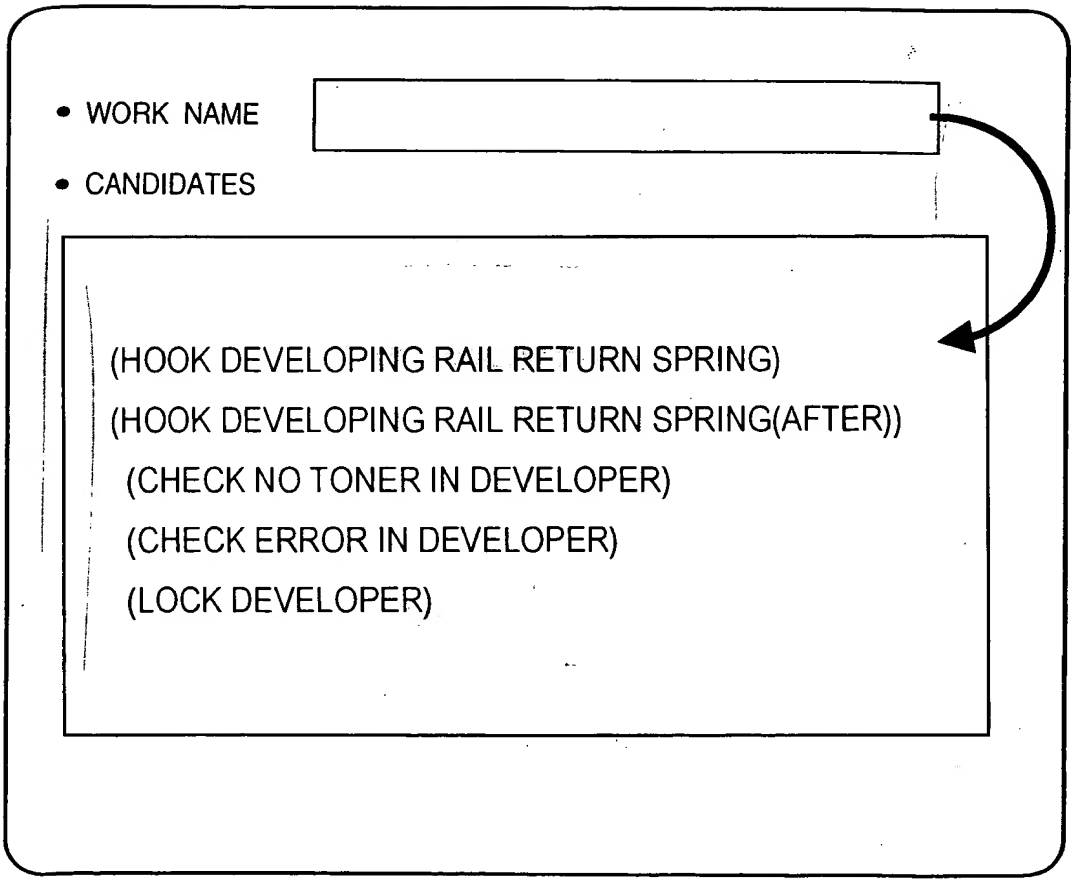


FIG. 11

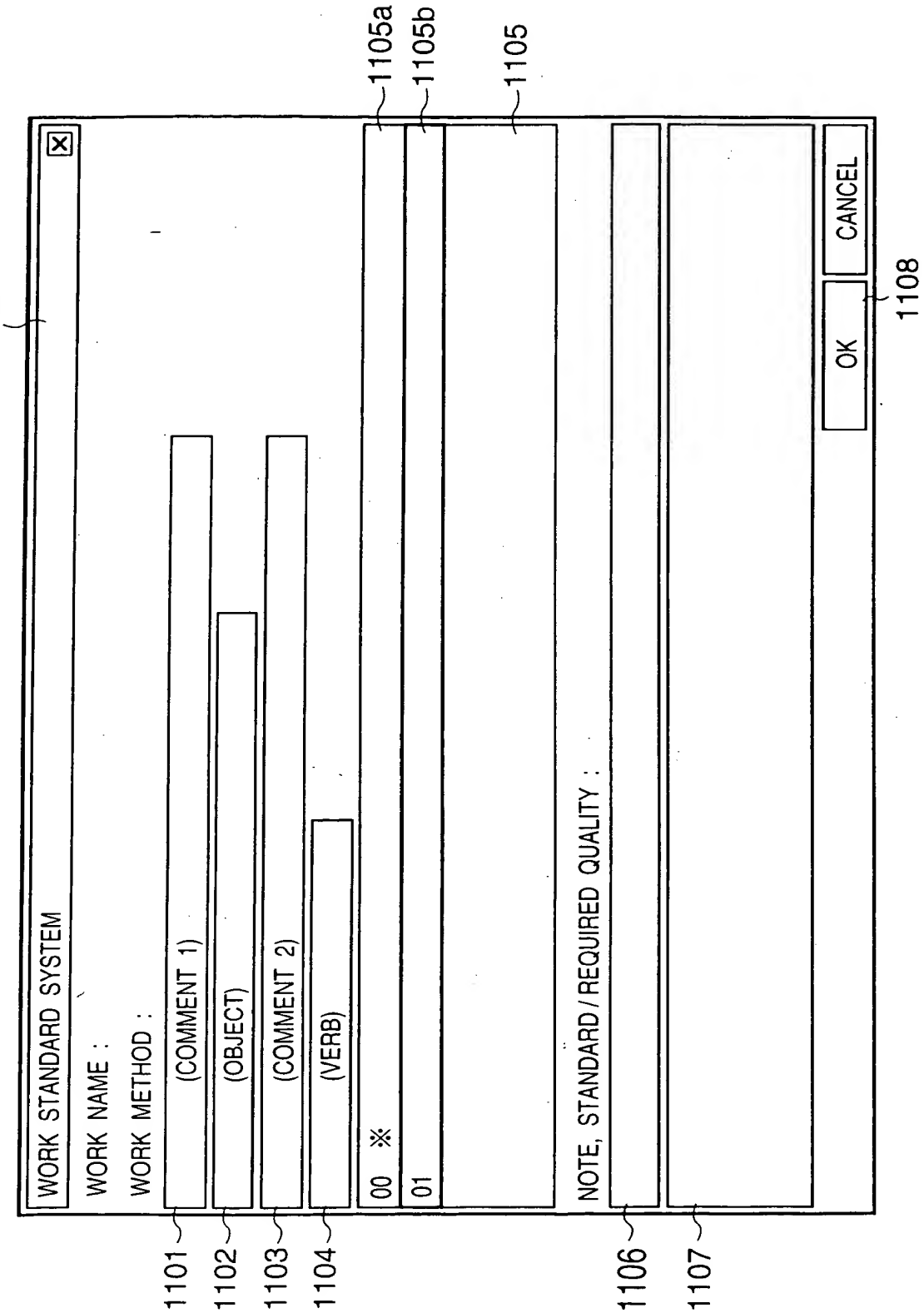

1100
WORK STANDARD SYSTEM
WORK NAME :
WORK METHOD :
(COMMENT 1)
(OBJECT)
(COMMENT 2)
(VERB)
00 ※
01
NOTE, STANDARD / REQUIRED QUALITY :
OK
CANCEL
1101
1102
1103
1104
1105a
1105b
1105
1106
1107
1108

FIG. 12

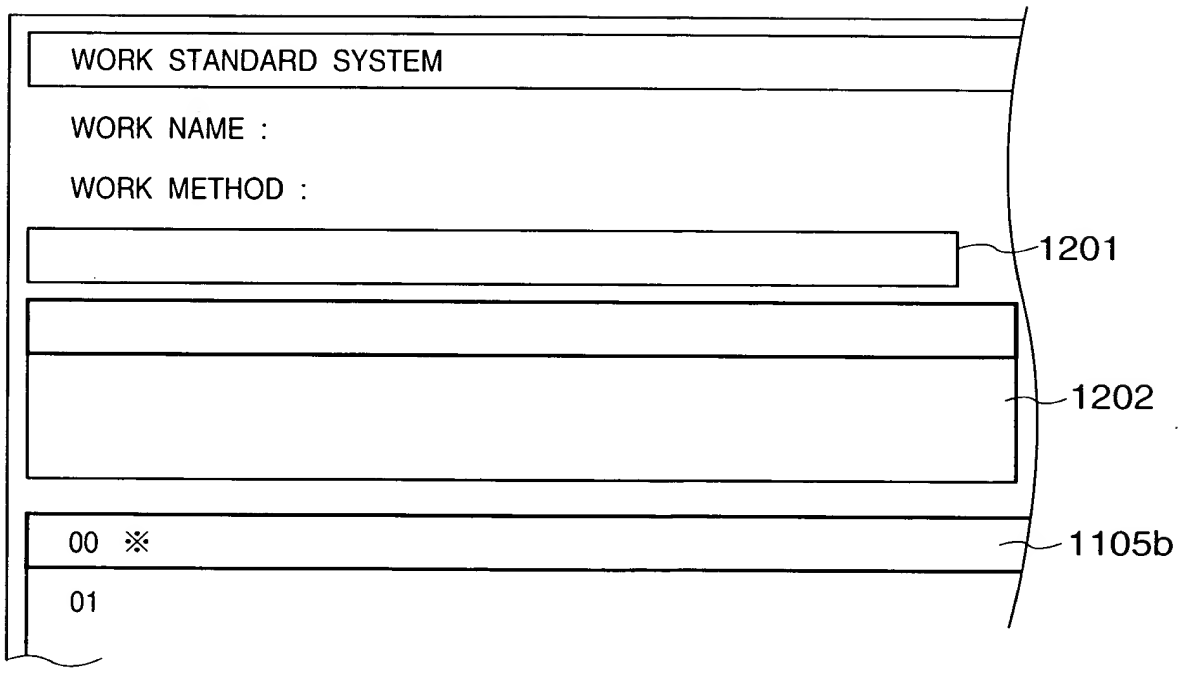

WORK STANDARD SYSTEM
WORK NAME :
WORK METHOD :
1201
1202
00 ※
1105b
01

FIG. 13

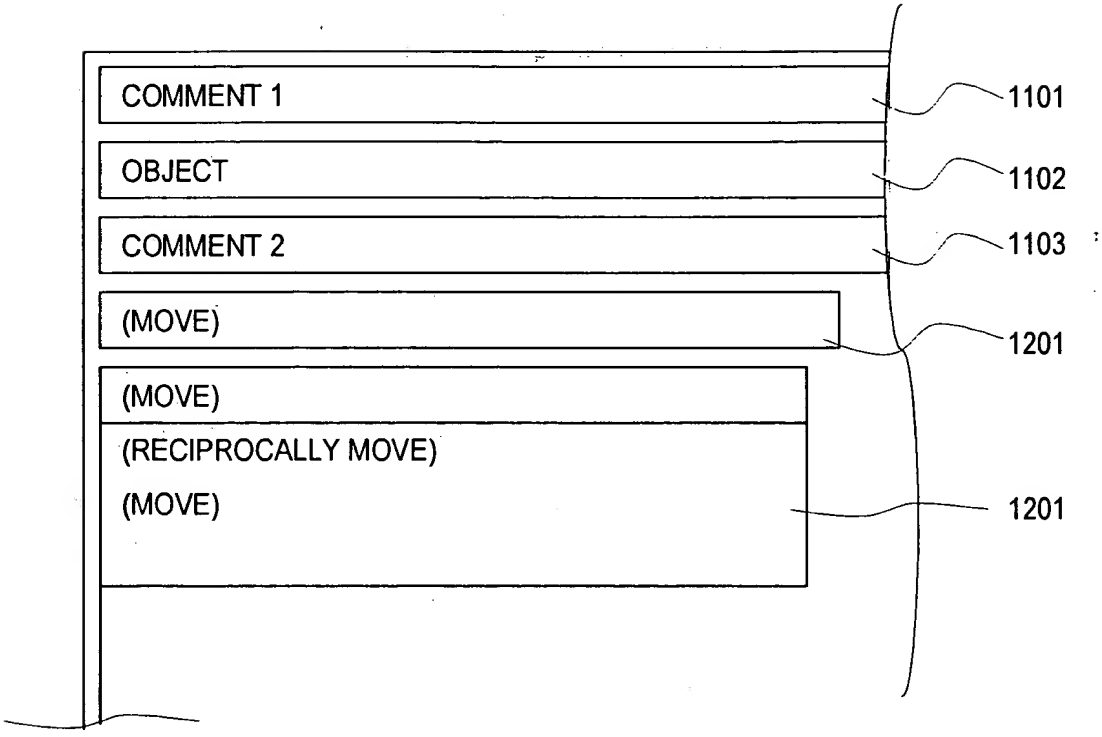

COMMENT 1
1101
OBJECT
1102
COMMENT 2
1103
(MOVE)
1201
(MOVE)
(RECIPROCALLY MOVE)
(MOVE)
1201

FIG. 14

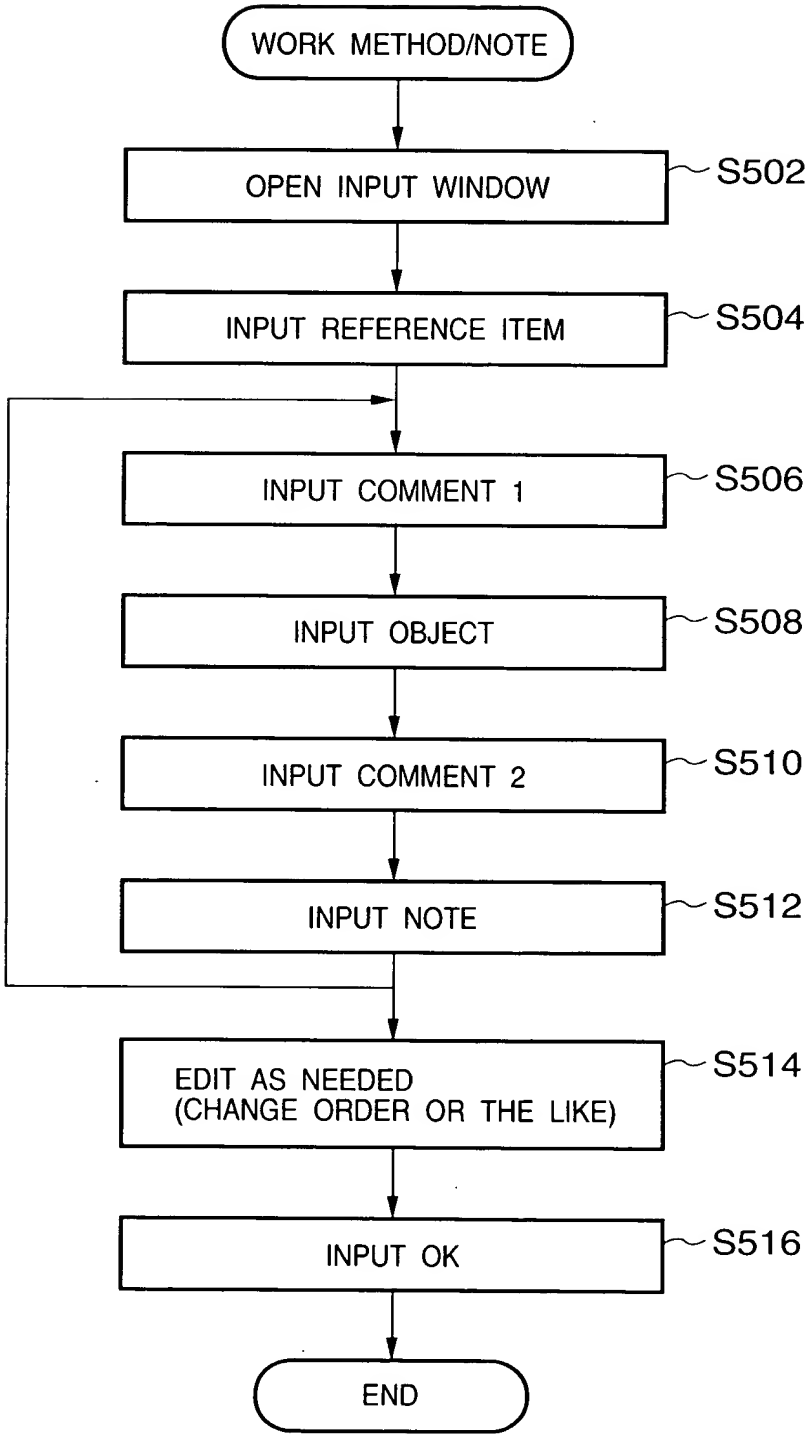

WORK METHOD/NOTE
OPEN INPUT WINDOW
S502
INPUT REFERENCE ITEM
S504
INPUT COMMENT 1
S506
INPUT OBJECT
S508
INPUT COMMENT 2
S510
INPUT NOTE
S512
EDIT AS NEEDED
(CHANGE ORDER OR THE LIKE)
S514
INPUT OK
S516
END

FIG. 15

00	※	
01	DO zzzz SUCH THAT xxxx AT wwww POSITION BECOMES yyyy	
02	WIND AV CORD	
03	CONFIRM 100V SYSTEM	
04	SET CRG HOLDER	

FIG. 16

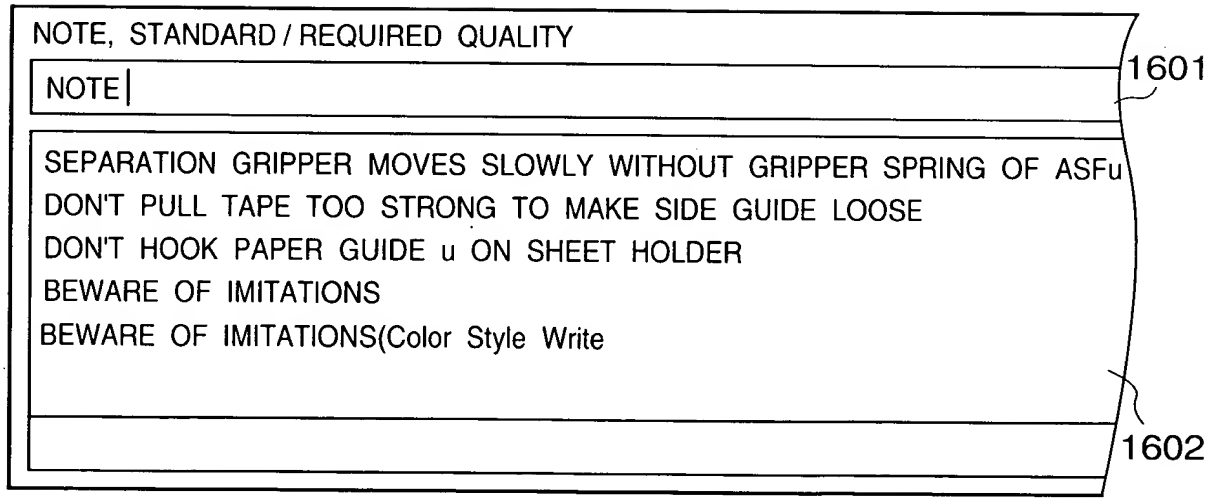


FIG. 17

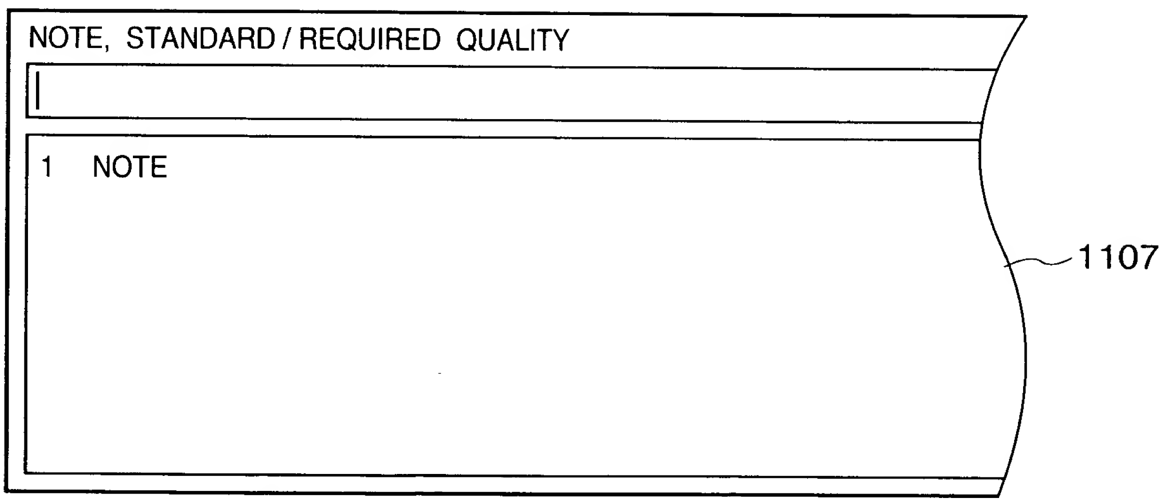


FIG. 18

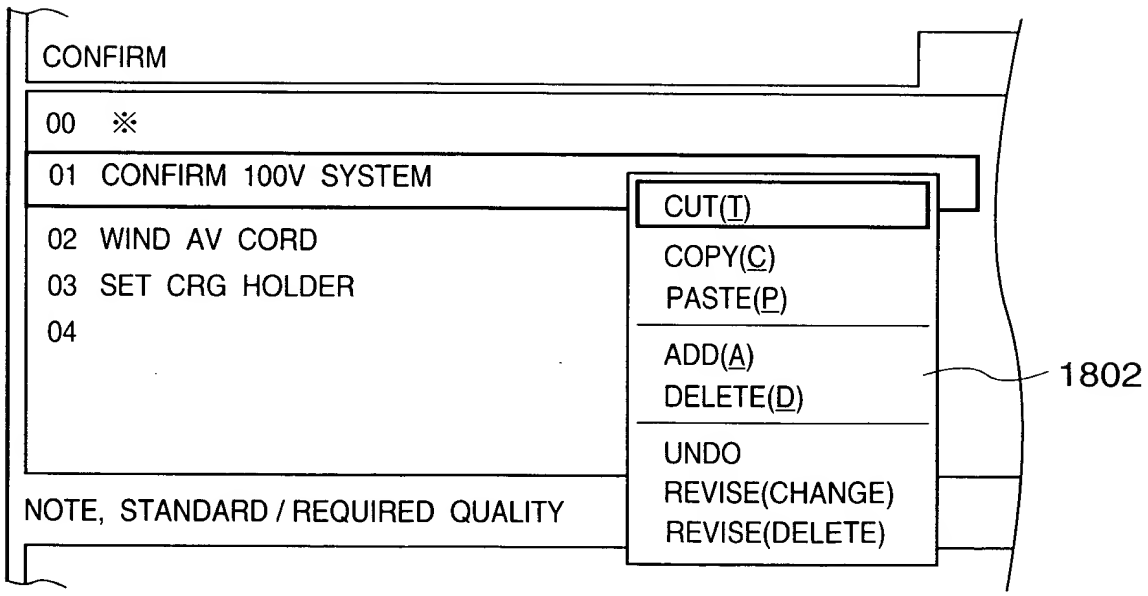

CONFIRM
00 ※
01 CONFIRM 100V SYSTEM
02 WIND AV CORD
03 SET CRG HOLDER
04
NOTE, STANDARD / REQUIRED QUALITY
CUT(T)
COPY(C)
PASTE(P)
ADD(A)
DELETE(D)
UNDO
REVISE(CHANGE)
REVISE(DELETE)
1802

FIG. 19

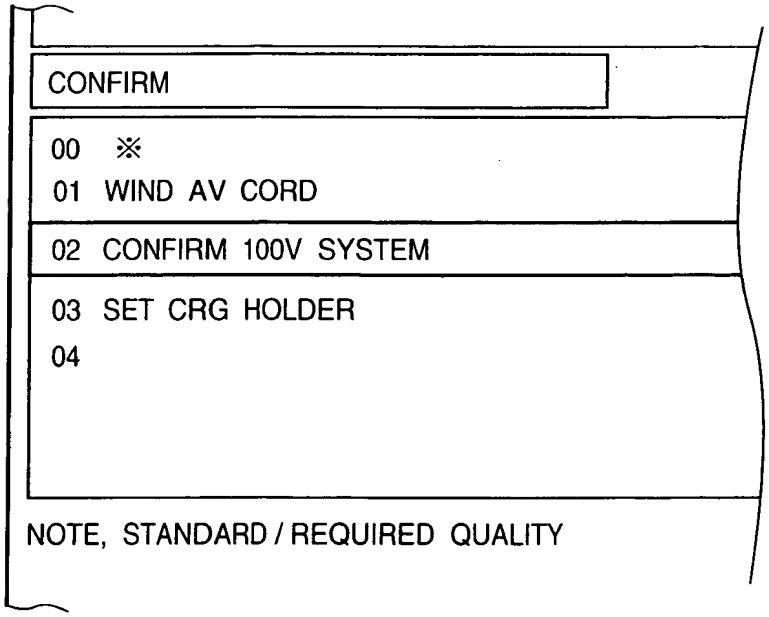

CONFIRM
00 ※
01 WIND AV CORD
02 CONFIRM 100V SYSTEM
03 SET CRG HOLDER
04
NOTE, STANDARD / REQUIRED QUALITY

FIG. 20

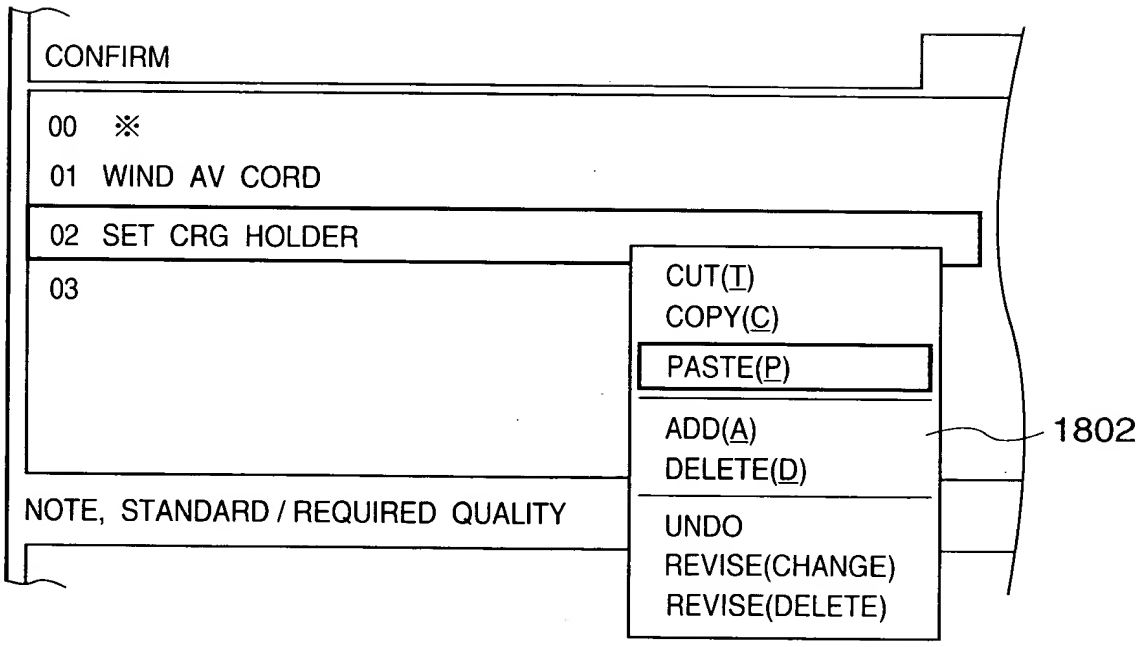

CONFIRM
00 ※
01 WIND AV CORD
02 SET CRG HOLDER
03
NOTE, STANDARD / REQUIRED QUALITY
CUT(T)
COPY(C)
PASTE(P)
ADD(A)
DELETE(D)
UNDO
REVISE(CHANGE)
REVISE(DELETE)
1802

FIG. 21

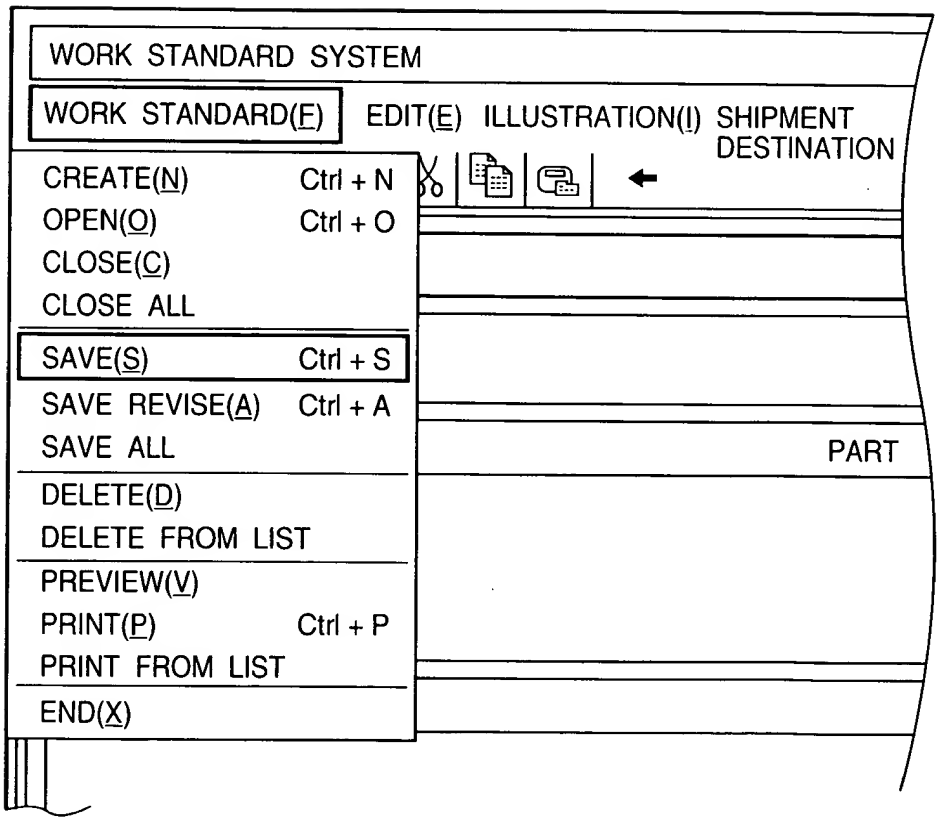

WORK STANDARD SYSTEM
WORK STANDARD(F)
EDIT(E)
ILLUSTRATION(I)
SHIPMENT DESTINATION
CREATE(N) Ctrl + N
OPEN(O) Ctrl + O
CLOSE(C)
CLOSE ALL
SAVE(S) Ctrl + S
SAVE REVISE(A) Ctrl + A
SAVE ALL
DELETE(D)
DELETE FROM LIST
PREVIEW(V)
PRINT(P) Ctrl + P
PRINT FROM LIST
END(X)
PART

FIG. 22

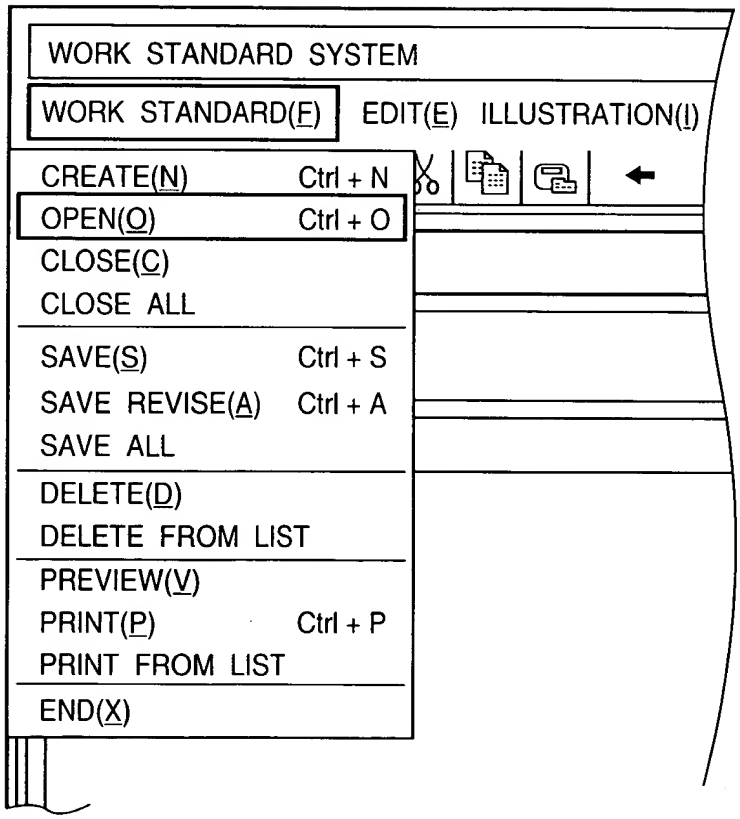

WORK STANDARD SYSTEM
WORK STANDARD(F)
EDIT(E)
ILLUSTRATION(I)
CREATE(N) Ctrl + N
OPEN(O) Ctrl + O
CLOSE(C)
CLOSE ALL
SAVE(S) Ctrl + S
SAVE REVISE(A) Ctrl + A
SAVE ALL
DELETE(D)
DELETE FROM LIST
PREVIEW(V)
PRINT(P) Ctrl + P
PRINT FROM LIST
END(X)

FIG. 23

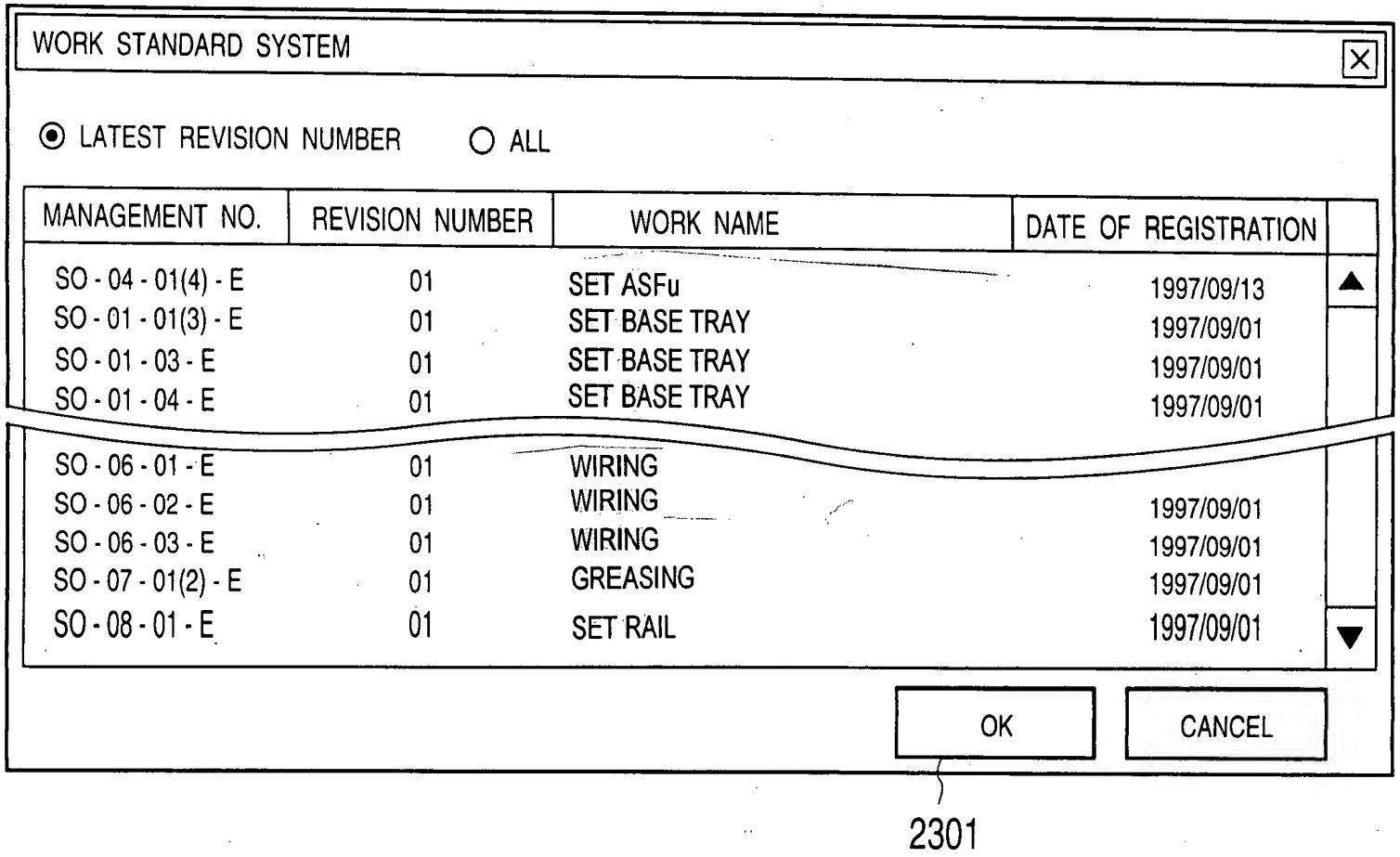

WORK STANDARD SYSTEM
LATEST REVISION NUMBER
ALL
MANAGEMENT NO.
REVISION NUMBER
WORK NAME
DATE OF REGISTRATION
SO - 04 - 01(4) - E
01
SET ASFu
1997/09/13
SO - 01 - 01(3) - E
01
SET BASE TRAY
1997/09/01
SO - 01 - 03 - E
01
SET BASE TRAY
1997/09/01
SO - 01 - 04 - E
01
SET BASE TRAY
1997/09/01
SO - 06 - 01 - E
01
WIRING
SO - 06 - 02 - E
01
WIRING
1997/09/01
SO - 06 - 03 - E
01
WIRING
1997/09/01
SO - 07 - 01(2) - E
01
GREASING
1997/09/01
SO - 08 - 01 - E
01
SET RAIL
1997/09/01
OK
CANCEL
2301

FIG. 24

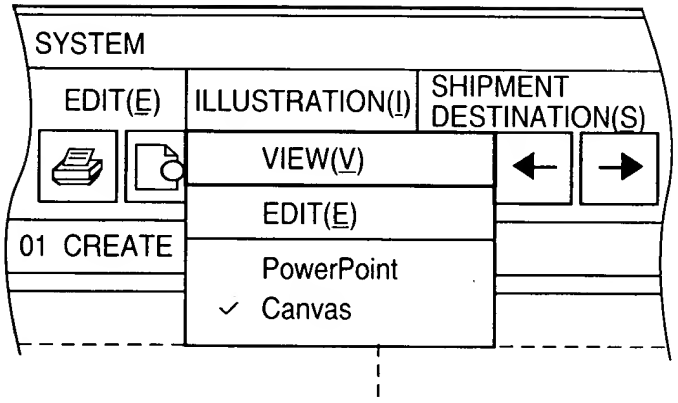


FIG. 25

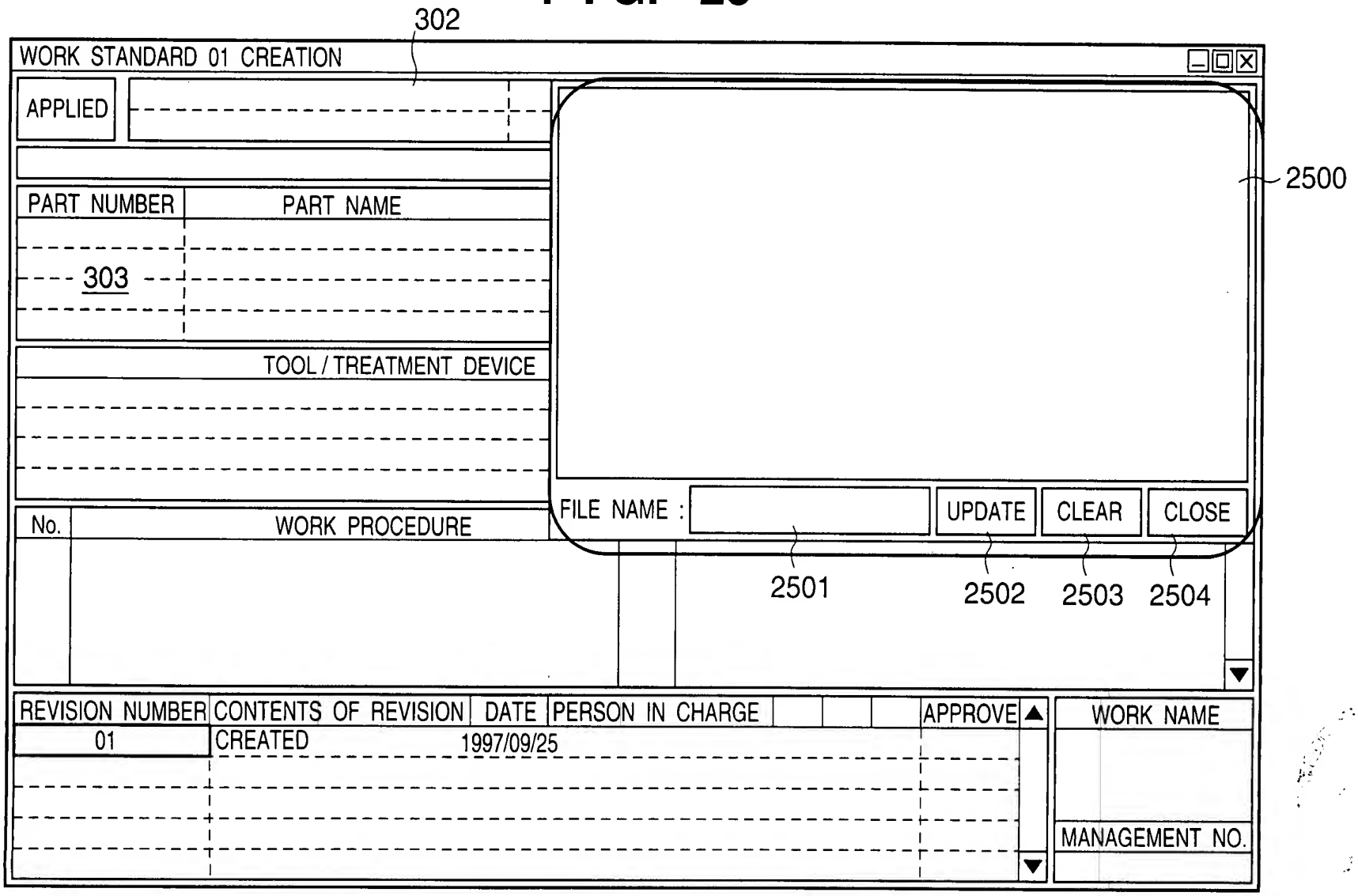

302
WORK STANDARD 01 CREATION
APPLIED
PART NUMBER
PART NAME
303
TOOL / TREATMENT DEVICE
No.
WORK PROCEDURE
2500
FILE NAME :
UPDATE
CLEAR
CLOSE
2501
2502
2503
2504
REVISION NUMBER
CONTENTS OF REVISION
DATE
PERSON IN CHARGE
APPROVE
01
CREATED
1997/09/25
WORK NAME
MANAGEMENT NO.

FIG. 26

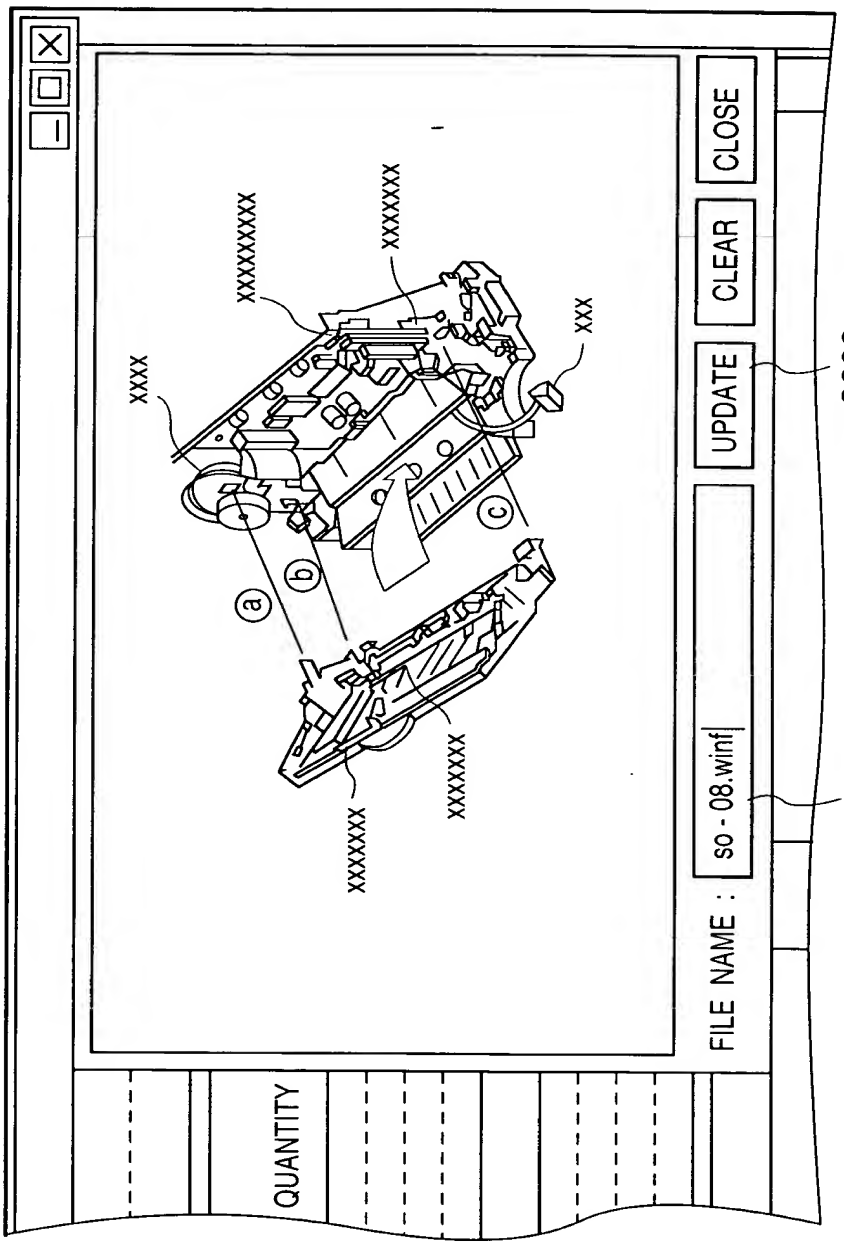

QUANTITY
FILE NAME :
so - 08.winf
UPDATE
CLEAR
CLOSE
2601
2602
XXXXXXXX
XXXXXXX
XXXX
XXX
XXXXXXX
XXXXXXX
a
b
c

FIG. 27

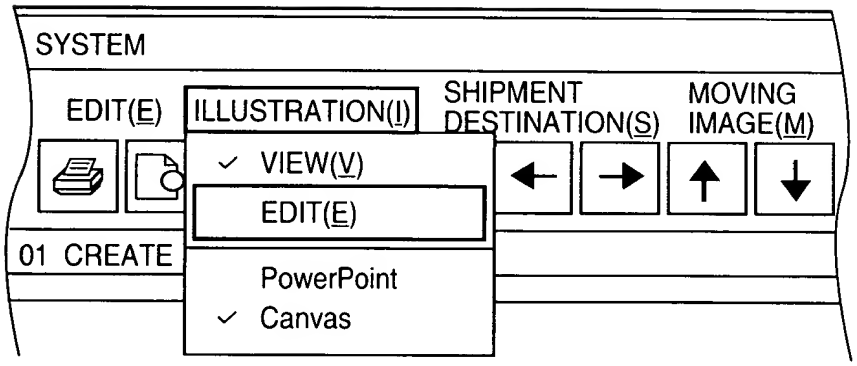


FIG. 28

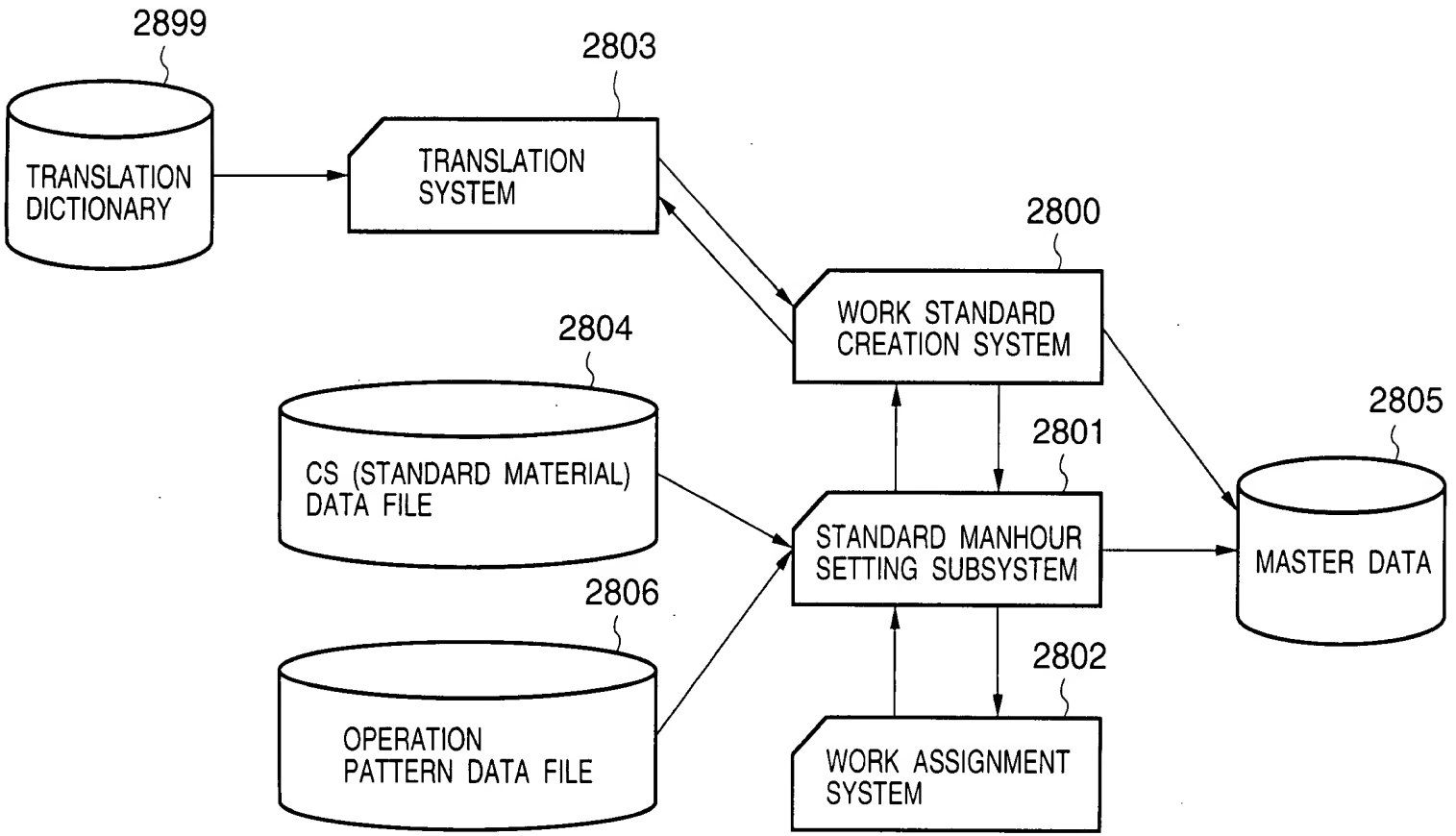


FIG. 29

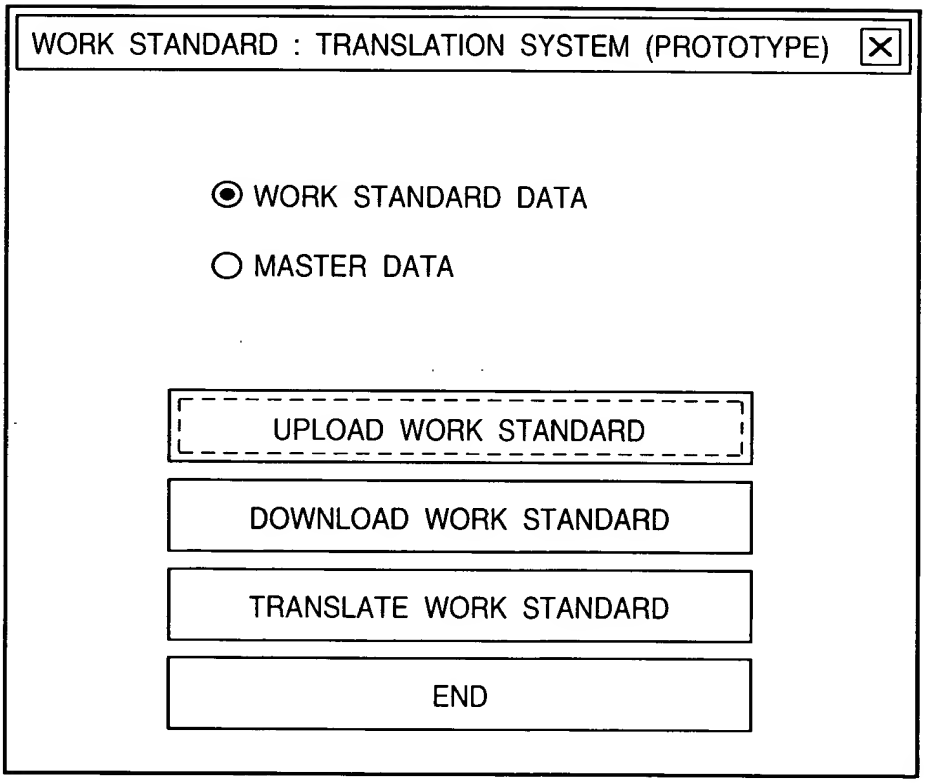

WORK STANDARD : TRANSLATION SYSTEM (PROTOTYPE)
WORK STANDARD DATA
MASTER DATA
UPLOAD WORK STANDARD
DOWNLOAD WORK STANDARD
TRANSLATE WORK STANDARD
END

FIG. 30

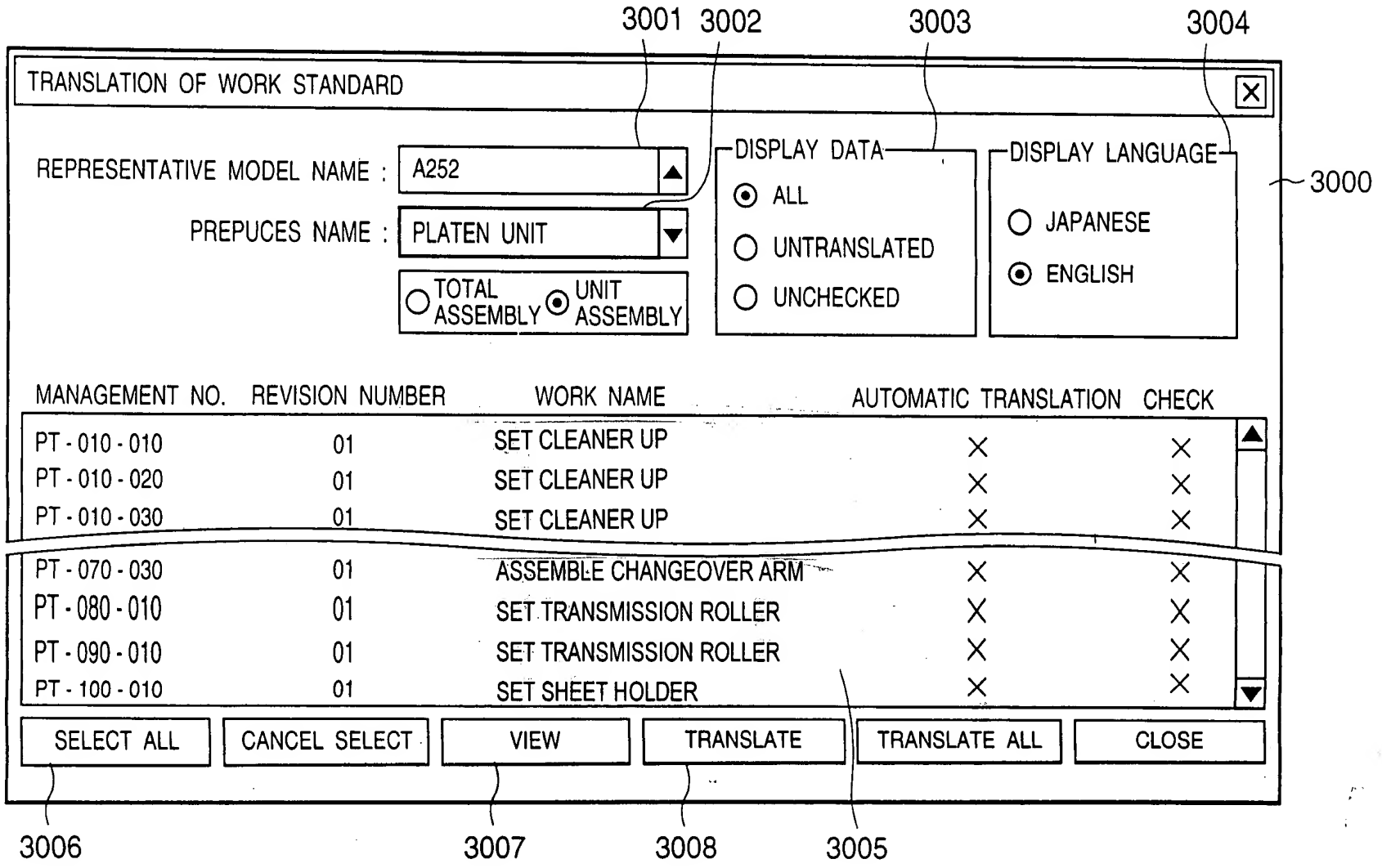

3001
3002
3003
3004
TRANSLATION OF WORK STANDARD
REPRESENTATIVE MODEL NAME :
A252
PREPUCES NAME :
PLATEN UNIT
TOTAL ASSEMBLY
UNIT ASSEMBLY
DISPLAY DATA
ALL
UNTRANSLATED
UNCHECKED
DISPLAY LANGUAGE
JAPANESE
ENGLISH
3000
MANAGEMENT NO.
REVISION NUMBER
WORK NAME
AUTOMATIC TRANSLATION
CHECK
PT - 010 - 010 01 SET CLEANER UP
PT - 010 - 020 01 SET CLEANER UP
PT - 010 - 030 01 SET CLEANER UP
PT - 070 - 030 01 ASSEMBLE CHANGEOVER ARM
PT - 080 - 010 01 SET TRANSMISSION ROLLER
PT - 090 - 010 01 SET TRANSMISSION ROLLER
PT - 100 - 010 01 SET SHEET HOLDER
SELECT ALL
CANCEL SELECT
VIEW
TRANSLATE
TRANSLATE ALL
CLOSE
3006
3007
3008
3005

FIG. 31

TRANSLATION OF WORK STANDARD (PROTOTYPE)

WORK STANDARD(E) ILLUSTRATION(I) VOICE(S) WINDOW(W)

WORK STANDARD PN-030-020 01 New crested by (PX2056) A252 PUMP UNIT

Model	QG5-1319

Part No.	Part Name	Qty	Part No.	Part Name	Qty

Total	Qty	PN

3101

No.	Procedure	No.	Precaution / Conditions
01	The blade lever spring hooks to ① of the blade lever.		
02	Side the blade lever in the direction of arrow ② and check there is no catch and nor the return by the spring force.	02 - 01	No Table Data 1
03	Check press-fitting the blade lever shaft leading edge to the braid folder leading edge.	03 - 01	No Table Data 1

	Details is of Revision	Data	By	OK
01	New Created by (PX2056)			

Procedure
No Table Data 1

Page No.
PN-030-020

FIG. 32

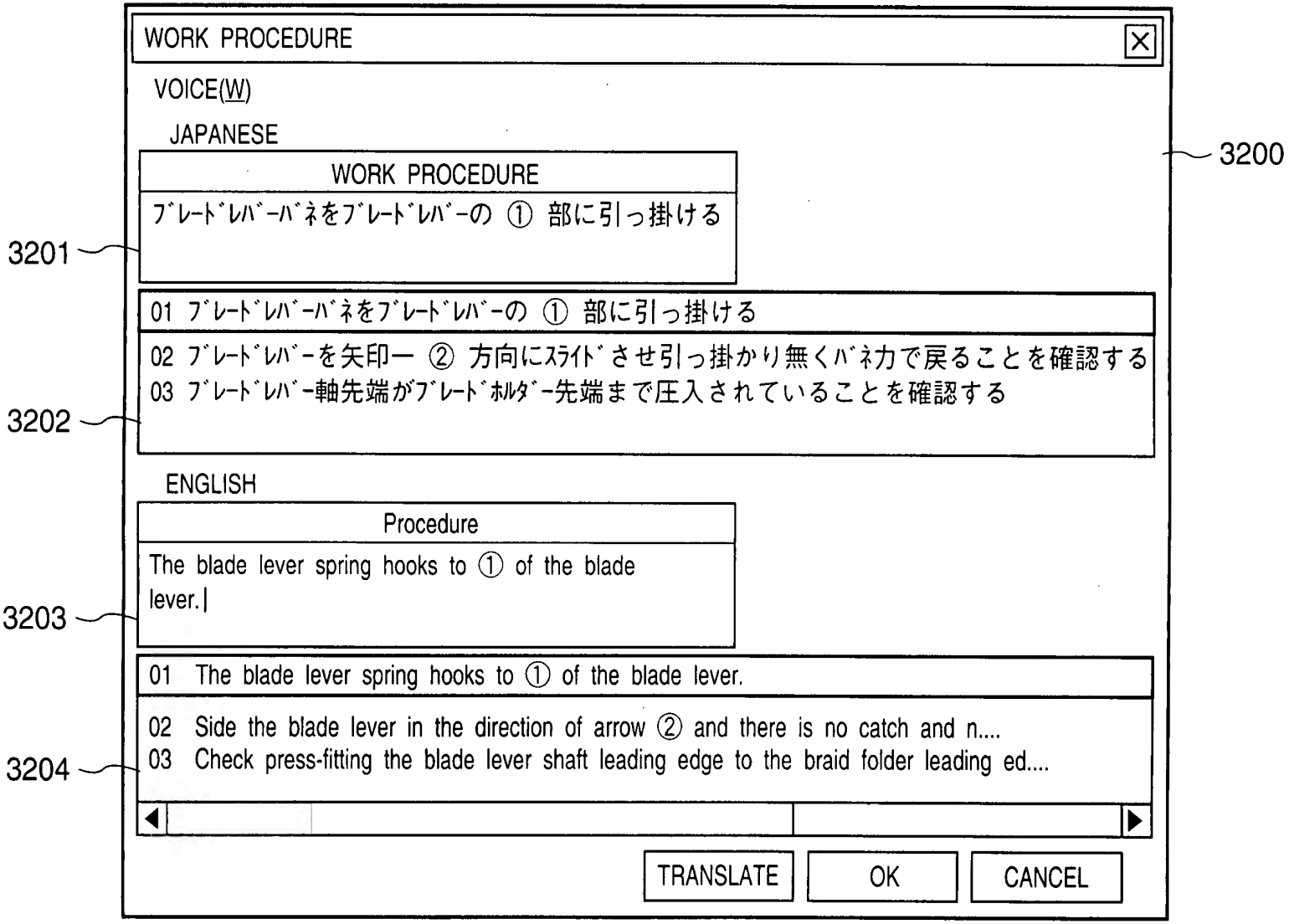

WORK PROCEDURE
VOICE(W)
JAPANESE
WORK PROCEDURE
ﾌﾞﾚｰﾄﾞﾚﾊﾞｰﾊﾞﾈをﾌﾞﾚｰﾄﾞﾚﾊﾞｰの ① 部に引っ掛ける
01 ﾌﾞﾚｰﾄﾞﾚﾊﾞｰﾊﾞﾈをﾌﾞﾚｰﾄﾞﾚﾊﾞｰの ① 部に引っ掛ける
02 ﾌﾞﾚｰﾄﾞﾚﾊﾞｰを矢印一 ② 方向にｽﾗｲﾄﾞさせ引っ掛かり無くﾊﾞﾈ力で戻ることを確認する
03 ﾌﾞﾚｰﾄﾞﾚﾊﾞｰ軸先端がﾌﾞﾚｰﾄﾞﾎﾙﾀﾞｰ先端まで圧入されていることを確認する
ENGLISH
Procedure
The blade lever spring hooks to ① of the blade lever.
01 The blade lever spring hooks to ① of the blade lever.
02 Side the blade lever in the direction of arrow ② and there is no catch and n....
03 Check press-fitting the blade lever shaft leading edge to the braid folder leading ed....
TRANSLATE
OK
CANCEL
3200
3201
3202
3203
3204

FIG. 33

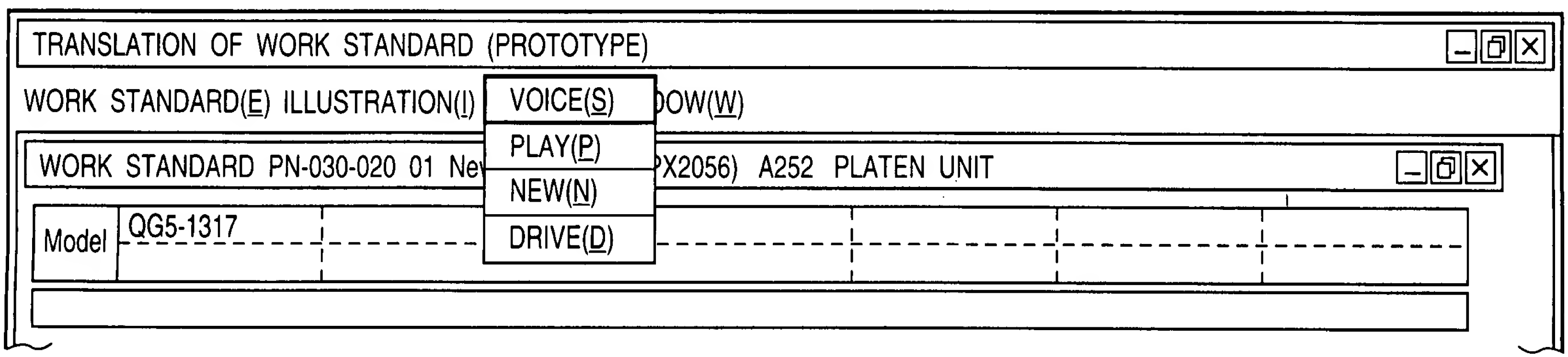


FIG. 34

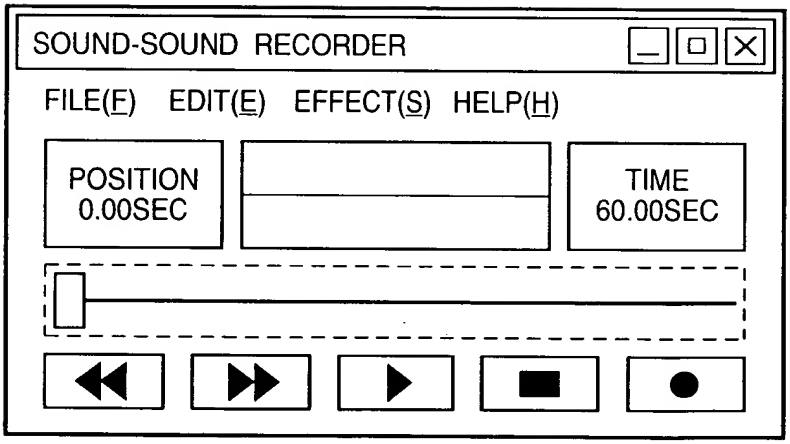

SOUND-SOUND RECORDER
FILE(F) EDIT(E) EFFECT(S) HELP(H)
POSITION
0.00SEC
TIME
60.00SEC

FIG. 35

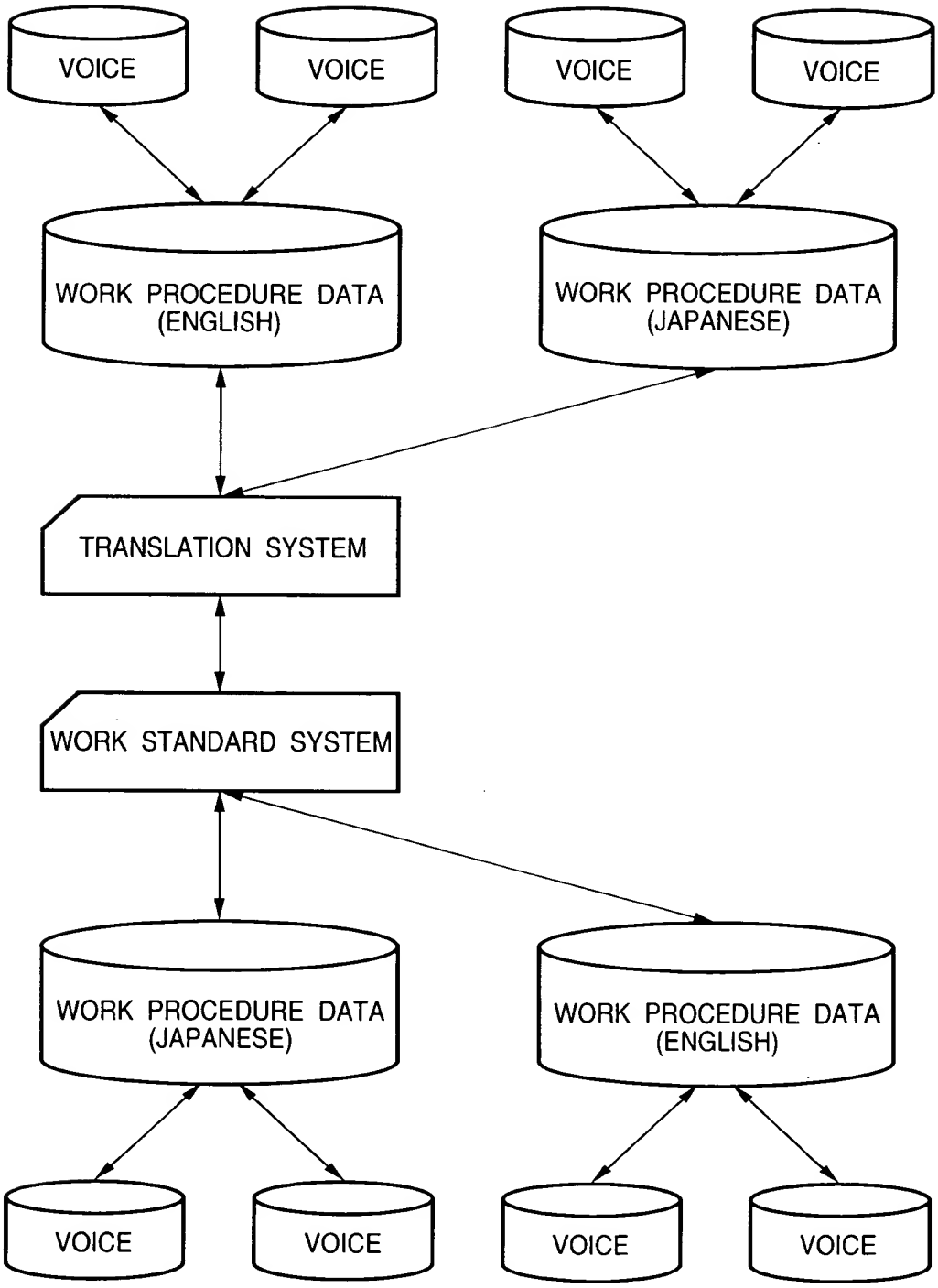

VOICE
VOICE
VOICE
VOICE
WORK PROCEDURE DATA (ENGLISH)
WORK PROCEDURE DATA (JAPANESE)
TRANSLATION SYSTEM
WORK STANDARD SYSTEM
WORK PROCEDURE DATA (JAPANESE)
WORK PROCEDURE DATA (ENGLISH)
VOICE
VOICE
VOICE
VOICE

FIG. 36

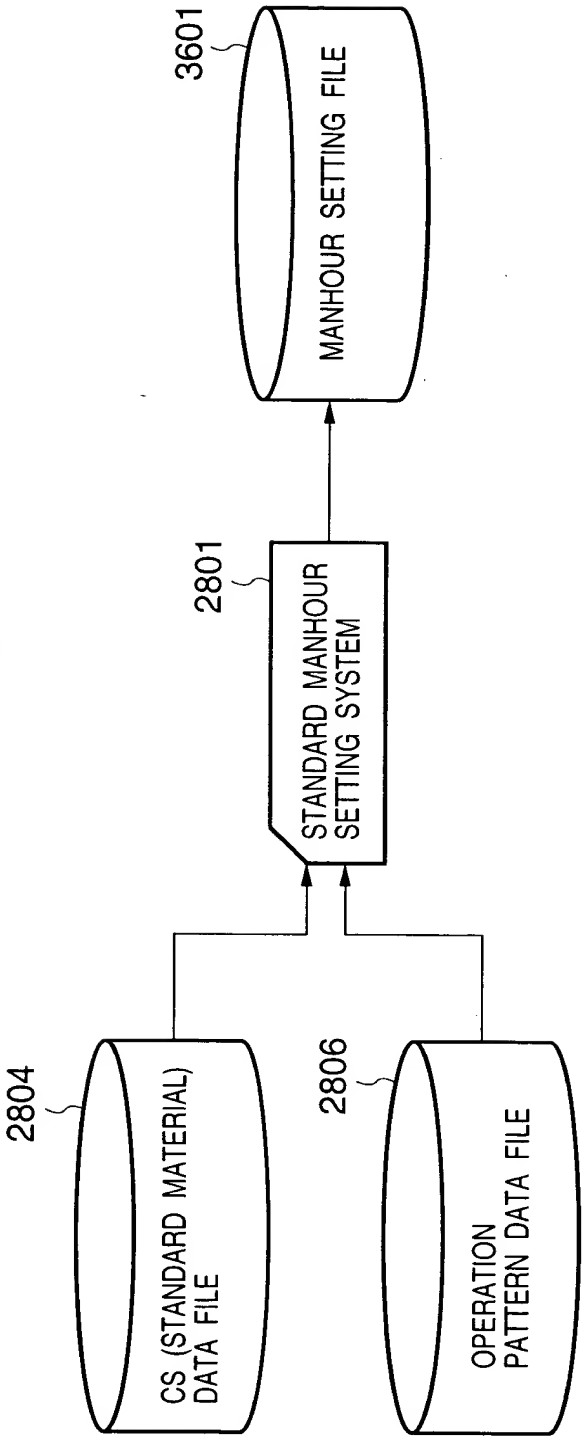

3601
MANHOUR SETTING FILE
2801
STANDARD MANHOUR SETTING SYSTEM
2804
CS (STANDARD MATERIAL) DATA FILE
2806
OPERATION PATTERN DATA FILE

FIG. 37

No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION

FIG. 38

STANDARD MATERIAL DATA

COMMENT 1	OBJECT	COMMENT 2	VERB	SET CONDITION DATA

FIG. 39

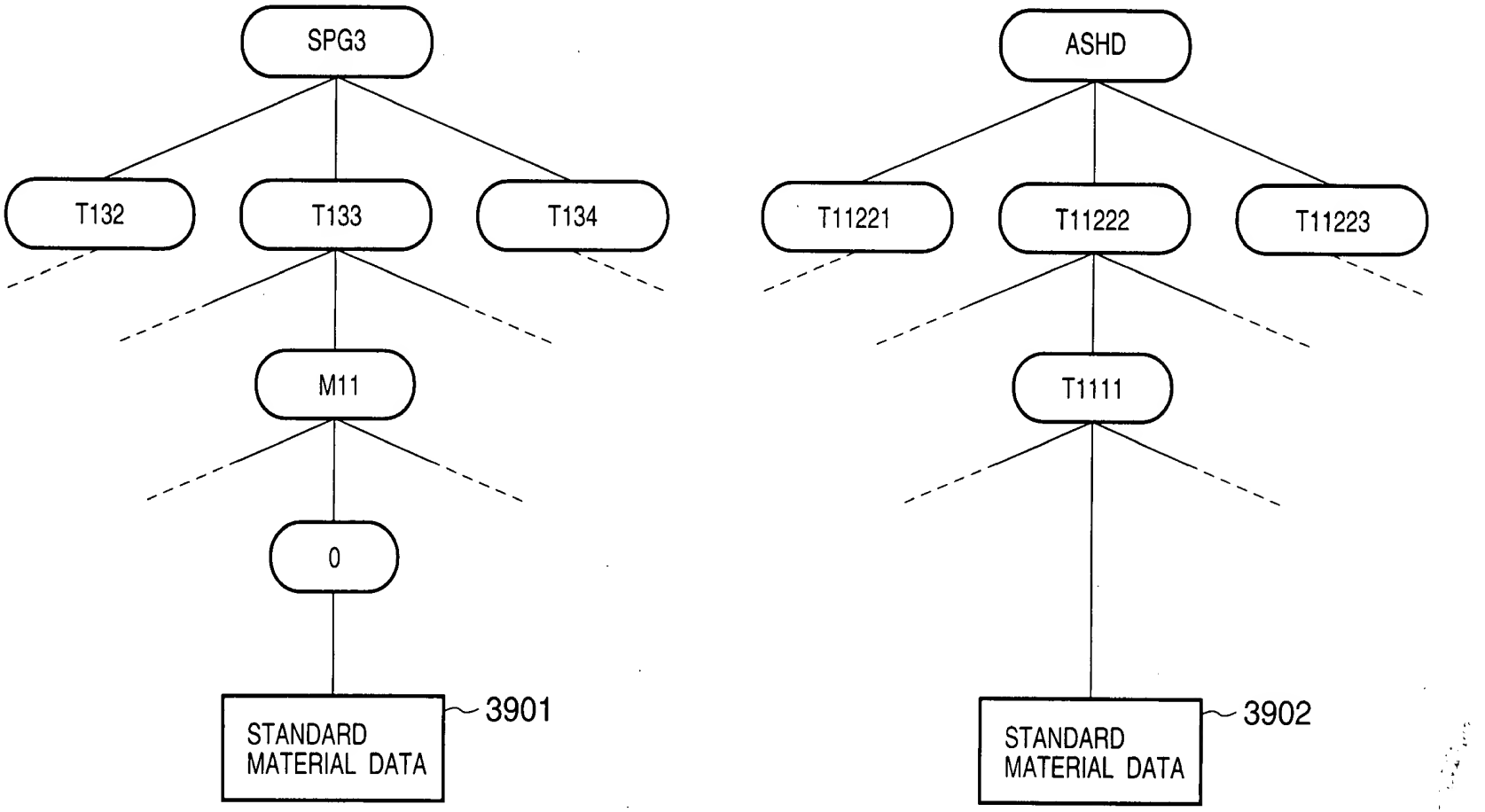

SPG3
T132
T133
T134
M11
0
STANDARD MATERIAL DATA
3901
ASHD
T11221
T11222
T11223
T1111
STANDARD MATERIAL DATA
3902

FIG. 40

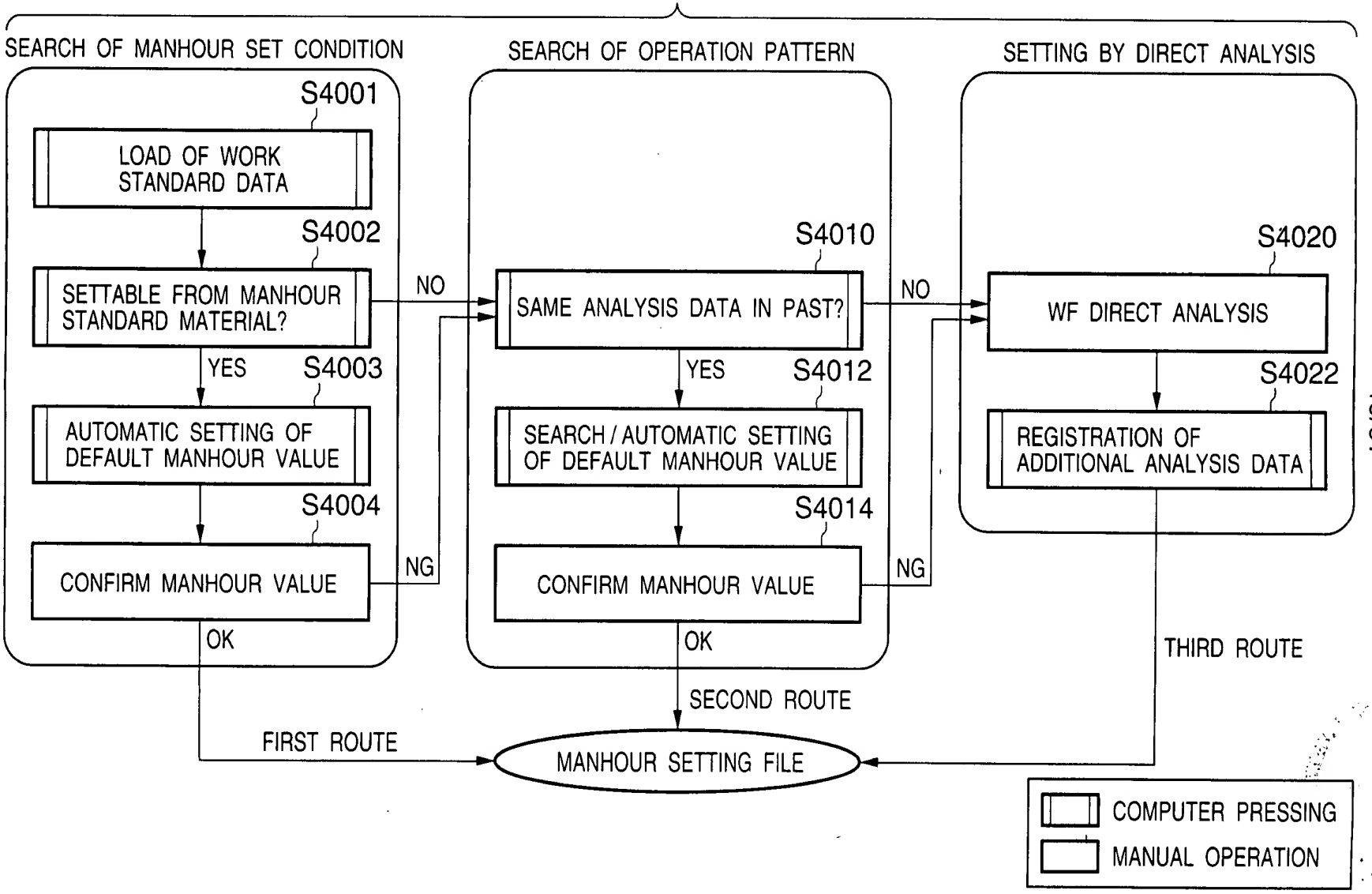

SEARCH OF MANHOUR SET CONDITION
SEARCH OF OPERATION PATTERN
SETTING BY DIRECT ANALYSIS
S4001
LOAD OF WORK STANDARD DATA
S4002
SETTABLE FROM MANHOUR STANDARD MATERIAL?
NO
YES
S4003
AUTOMATIC SETTING OF DEFAULT MANHOUR VALUE
S4004
CONFIRM MANHOUR VALUE
NG
OK
S4010
SAME ANALYSIS DATA IN PAST?
NO
YES
S4012
SEARCH / AUTOMATIC SETTING OF DEFAULT MANHOUR VALUE
S4014
CONFIRM MANHOUR VALUE
NG
OK
S4020
WF DIRECT ANALYSIS
S4022
REGISTRATION OF ADDITIONAL ANALYSIS DATA
THIRD ROUTE
SECOND ROUTE
FIRST ROUTE
MANHOUR SETTING FILE
COMPUTER PRESSING
MANUAL OPERATION

FIG. 41

3601

EDITING OF ELEMENT WORK

FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)

UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT

No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION	
1	(SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1				
2	(TURN ON SW OF TREATMENT DEVICE)	1	1				
3	(SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1				
4	(TURN OFF SW OF TREAMENT DEVICE)	1	1				
5	(DETACH SEPARATION ROLLER SHAFT FROM TREAMENT DEVICE)	1	1				

DATA LOAD

• ELEMENT WORK NAME

No.	COMMENT 1	OBJECT	COMMENT 2	VERB
1		LOAD SPRING	IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING	SET
2	OF TREATMENT DEVICE	SW		TURN ON
3		SEPARATION ROLLER	IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING	SET
4	OF TREATMENT DEVICE	SW		TURN OFF
5		SEPARATION ROLLER	FROM TREATMENT DEVICE	DETACH

FIG. 42

3601

EDITING OF ELEMENT WORK

FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)

UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT

No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	(SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	41	SPG3	T133 / M11 / 0
2	(TURN ON SW OF TREATMENT DEVICE)	1	1	8		
3	(SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	37	ASHD	T11222 / T1111
4	(TURN OFF SW OF TREAMENT DEVICE)	1	1	8		
5	(DETACH SEPARATION ROLLER SHAFT FROM TREAMENT DEVICE)	1	1	16	PUMB	T2111 / T111111

MATCH

SEARCH KEYWORD (KW)

No.	COMMENT 1	OBJECT	COMMENT 2	VERB	MANHOUR STANDARD MATERIAL	TIME VALUE
1	*	SPRING	TO *	SET	SPG3 T133/M11/0	41RU
2	*	*	TO *	SET	ASHED T11222/T1111	37RU
3	*	*	FROM *	DETACH	PUMQ T2111/T111111	16RU
4	*	E-RING	*	SET	RIN2 T11211/SO	76RU
5	*	CONNECTOR	*	INSERT	CONN T11211/SO	41RU
6	*	*	*	SCREW TIGHTLY	SCR6 M211/1	23RU

2804

FIG. 43

3601

EDITING OF ELEMENT WORK

FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)

UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT

No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	(SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	41	SPG3	T133 / M11 / 0
2	(TURN ON SW OF TREATMENT DEVICE)	1	1	8		/GET:-50E/M:-10E
3	(SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	37	ASHD	T11222 / T1111
4	(TURN OFF SW OF TREAMENT DEVICE)	1	1	8		/GET:-50E/M:-10E
5	(DETACH SEPARATION ROLLER SHAFT FROM TREAMENT DEVICE)	1	1	16	PUMB	T2111 / T111111

MATCH

No.	COMMENT 1	OBJECT	COMMENT 2	VERB	VERB PATTERN	TIME VALUE
1	TREATMENT DEVICE	SW		TURN ON	/GET:-50E/M:-10E	8RU
2	TREATMENT DEVICE	SW		TURN OFF	/GET:-50E/M:-10E	8RU
3		READING OPERATION UNIT		CLOSE	/GET:-50E/M:-50E	10RU
4		CRG DOOR		CLOSE	/GET:-50E/M:-50E	10RU
5		READING OPERATION UNIT		CLOSE	/GET:-50E/M:-50E	10RU
6		POWER CODE		PULL OUT	/GET:-50Egr2/M:-10E	16RU
7		POWER CODE FOR MEASUREMENT		PULL OUT	/GET:-50Egr2/M:-10E	16RU

2806

FIG. 44

3601

EDITING OF ELEMENT WORK

FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)

UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT

No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	(SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	41	SPG3	T133 / M11 / 0
2	(TURN ON SW OF TREATMENT DEVICE)	1	1	8		/GET:-50E/M:-10E
3	(SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	37	ASHD	T11222 / T1111
4	(TURN OFF SW OF TREAMENT DEVICE)	1	1	8		/GET:-50E/M:-10E
5	(DETACH SEPARATION ROLLER SHAFT FROM TREAMENT DEVICE)	1	1	16	PUMB	T2111 / T111111

FIG. 45

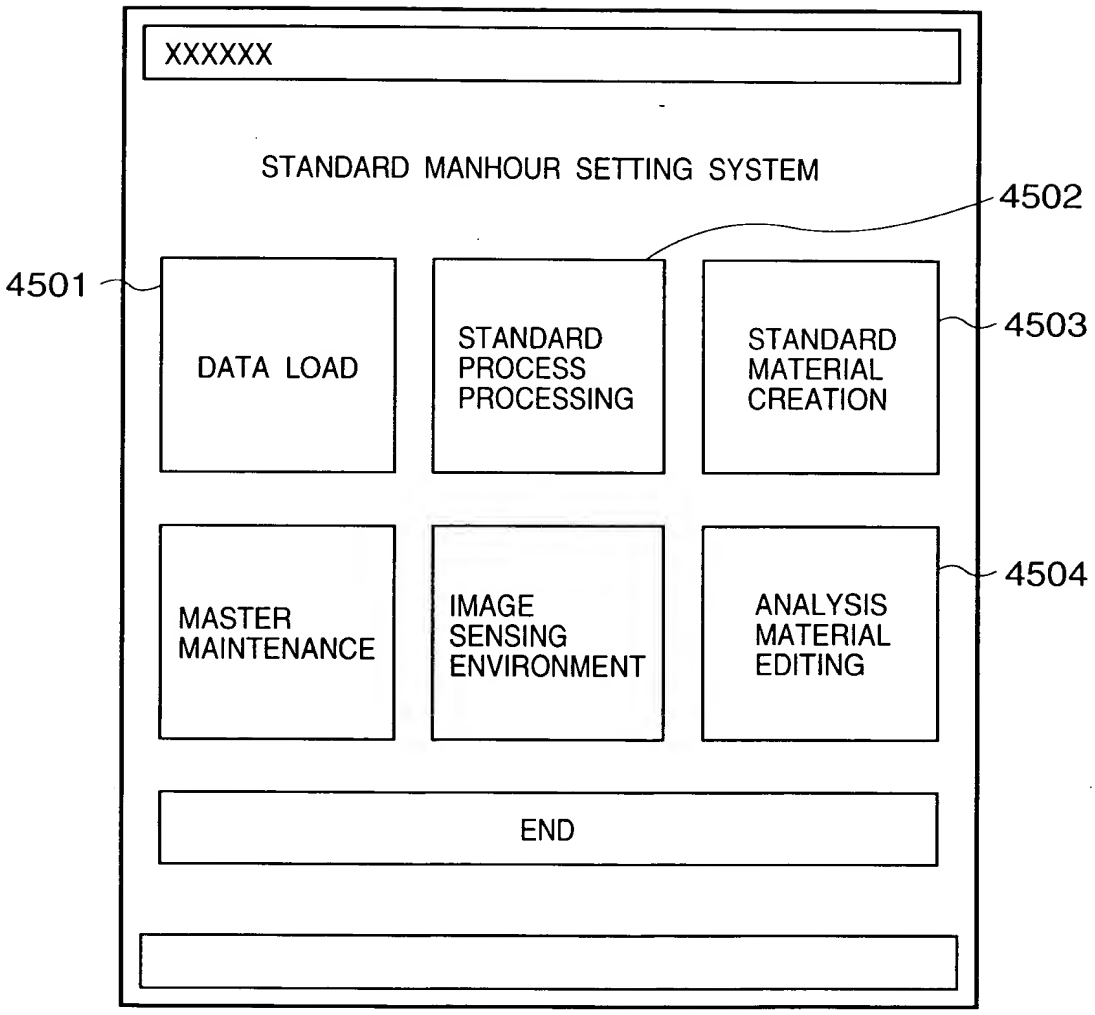

XXXXXX
STANDARD MANHOUR SETTING SYSTEM
4501
4502
4503
4504
DATA LOAD
STANDARD PROCESS PROCESSING
STANDARD MATERIAL CREATION
MASTER MAINTENANCE
IMAGE SENSING ENVIRONMENT
ANALYSIS MATERIAL EDITING
END

FIG. 46

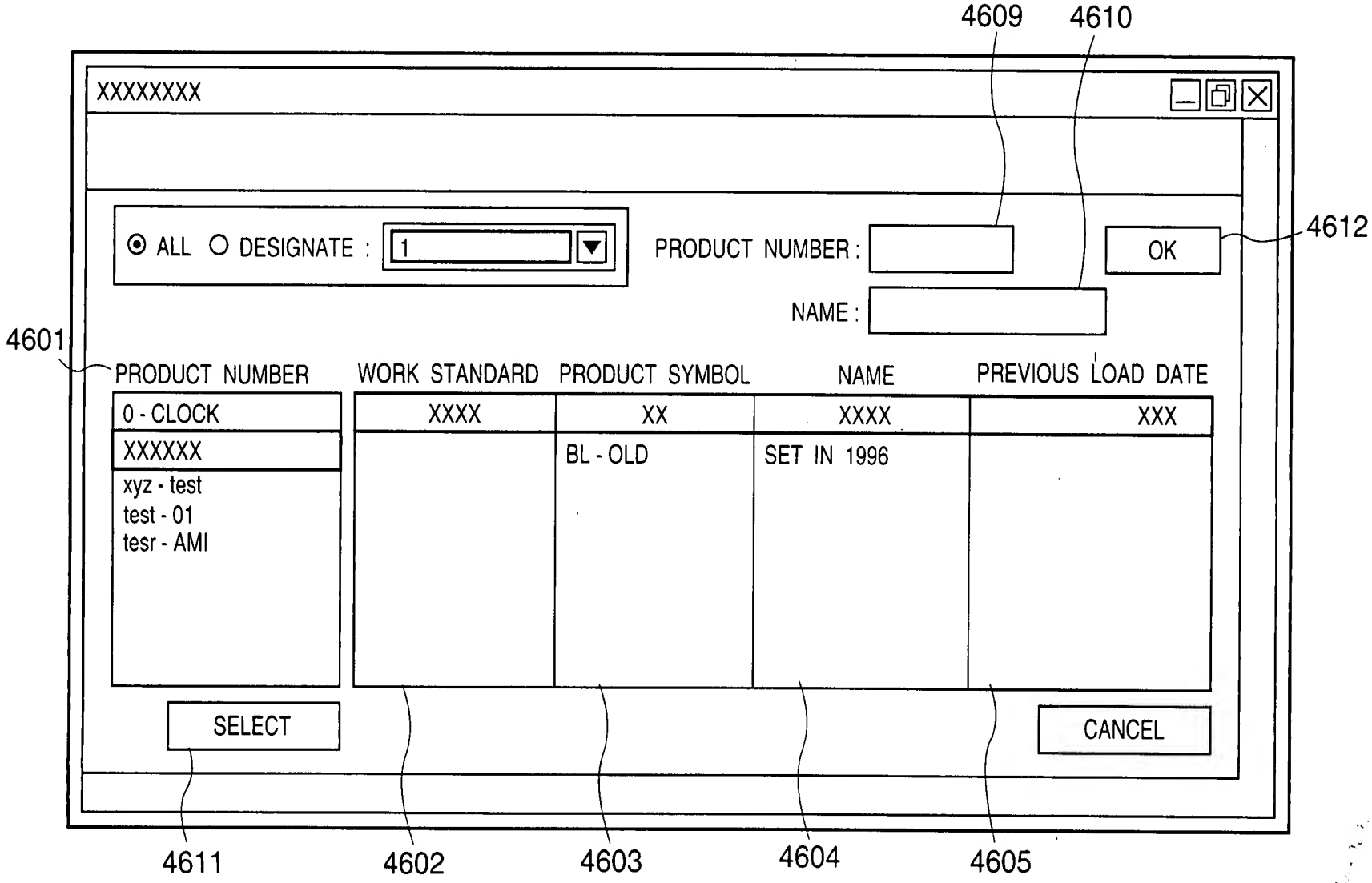

4609
4610
XXXXXXXX
ALL
DESIGNATE :
1
PRODUCT NUMBER :
OK
4612
NAME :
4601
PRODUCT NUMBER
WORK STANDARD
PRODUCT SYMBOL
NAME
PREVIOUS LOAD DATE
0 - CLOCK
XXXXXX
xyz - test
test - 01
tesr - AMI
XXXX
XX
XXXX
XXX
BL - OLD
SET IN 1996
SELECT
CANCEL
4611
4602
4603
4604
4605

FIG. 47

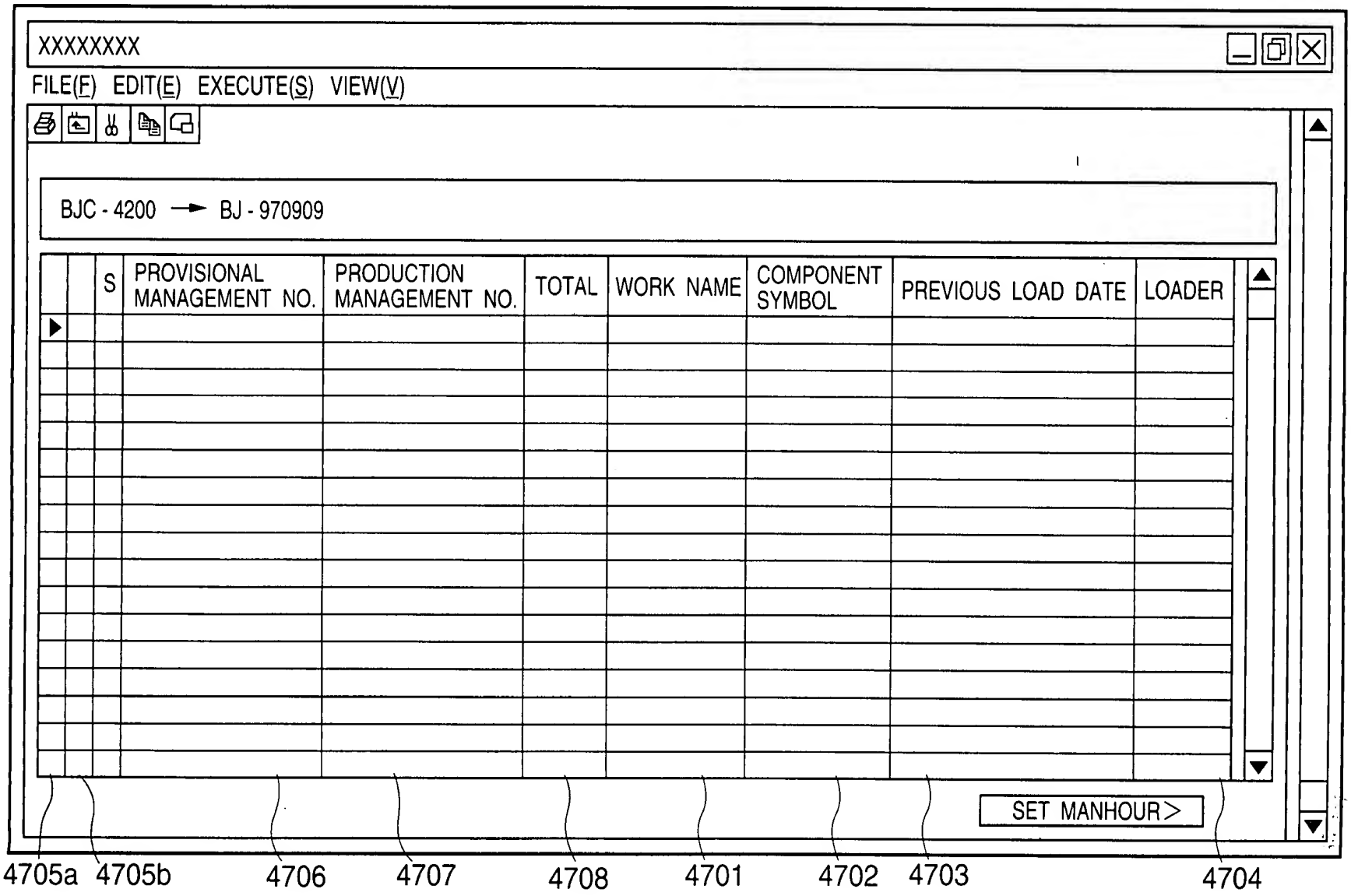

XXXXXXXX
FILE(F) EDIT(E) EXECUTE(S) VIEW(V)
BJC - 4200 → BJ - 970909
S
PROVISIONAL MANAGEMENT NO.
PRODUCTION MANAGEMENT NO.
TOTAL
WORK NAME
COMPONENT SYMBOL
PREVIOUS LOAD DATE
LOADER
SET MANHOUR>
4705a
4705b
4706
4707
4708
4701
4702
4703
4704

FIG. 48

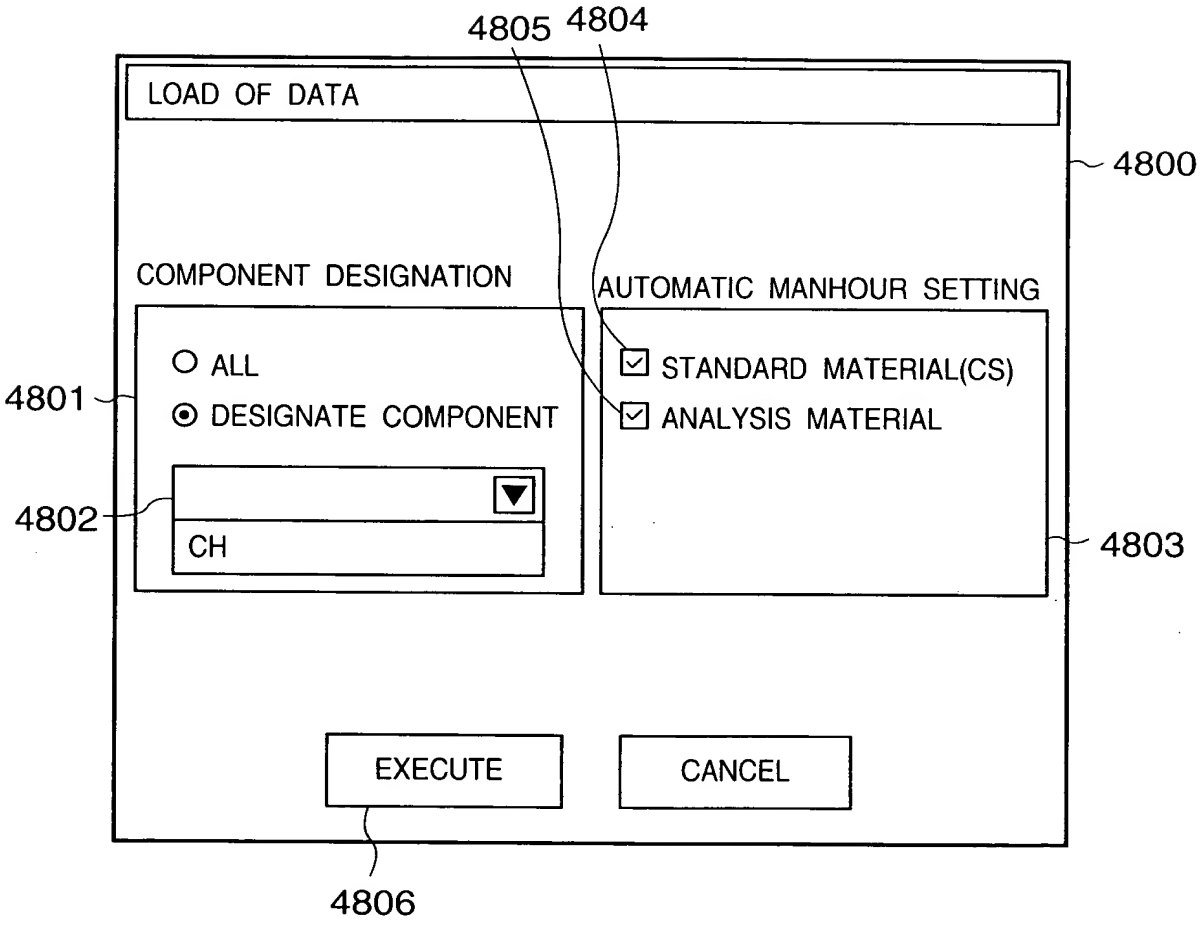

4805
4804
LOAD OF DATA
4800
COMPONENT DESIGNATION
AUTOMATIC MANHOUR SETTING
ALL
DESIGNATE COMPONENT
STANDARD MATERIAL(CS)
ANALYSIS MATERIAL
4801
4802
CH
4803
EXECUTE
CANCEL
4806

FIG. 49

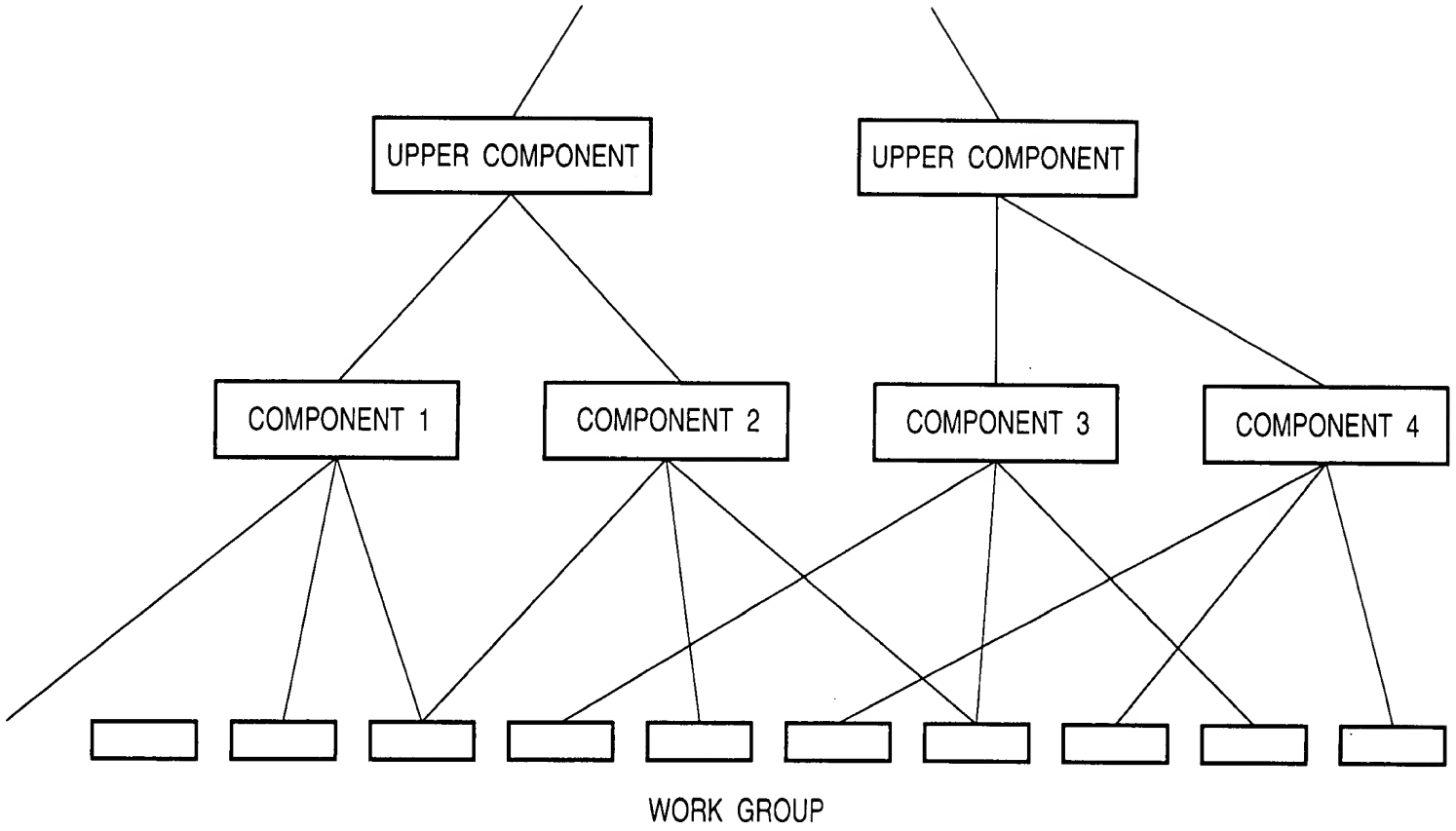

UPPER COMPONENT
UPPER COMPONENT
COMPONENT 1
COMPONENT 2
COMPONENT 3
COMPONENT 4
WORK GROUP

FIG. 50

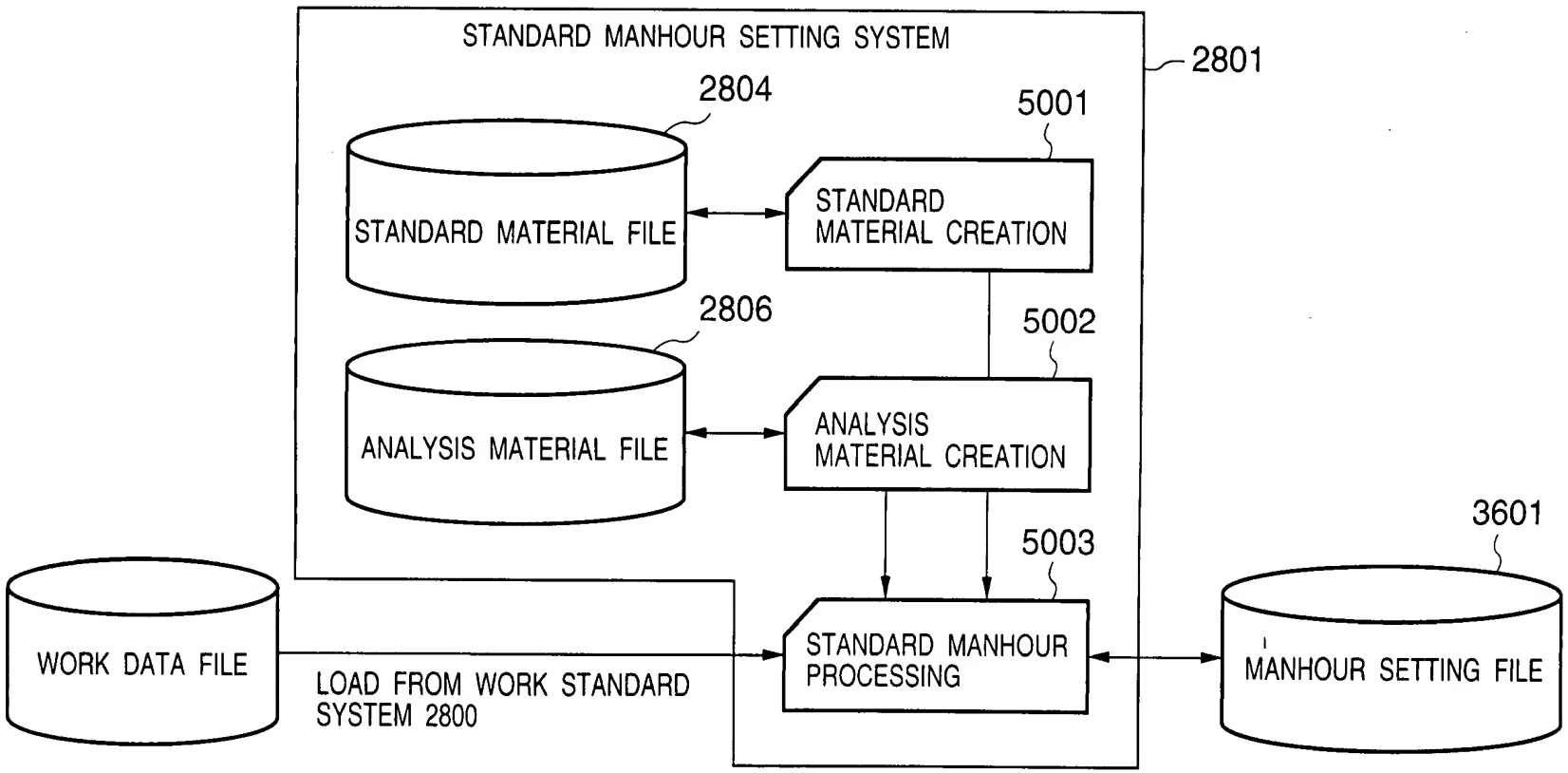

STANDARD MANHOUR SETTING SYSTEM
2801
2804
5001
STANDARD MATERIAL FILE
STANDARD MATERIAL CREATION
2806
5002
ANALYSIS MATERIAL FILE
ANALYSIS MATERIAL CREATION
3601
5003
WORK DATA FILE
LOAD FROM WORK STANDARD SYSTEM 2800
STANDARD MANHOUR PROCESSING
MANHOUR SETTING FILE

FIG. 51

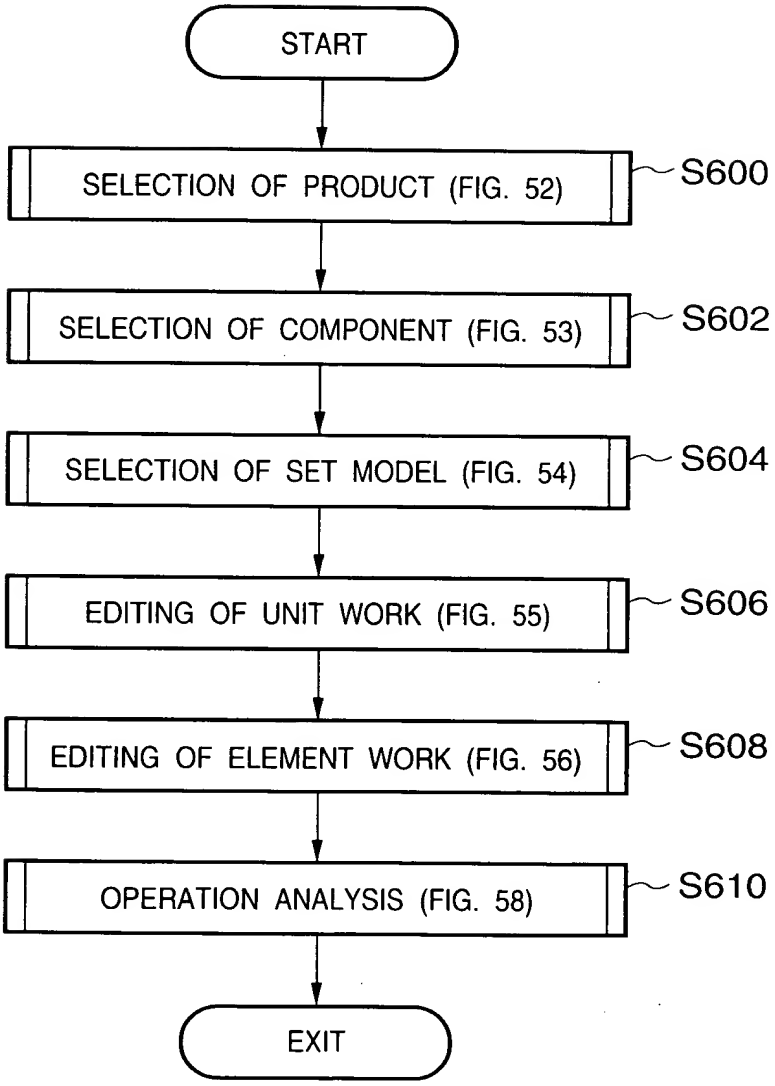

START
SELECTION OF PRODUCT (FIG. 52)
S600
SELECTION OF COMPONENT (FIG. 53)
S602
SELECTION OF SET MODEL (FIG. 54)
S604
EDITING OF UNIT WORK (FIG. 55)
S606
EDITING OF ELEMENT WORK (FIG. 56)
S608
OPERATION ANALYSIS (FIG. 58)
S610
EXIT

FIG. 52

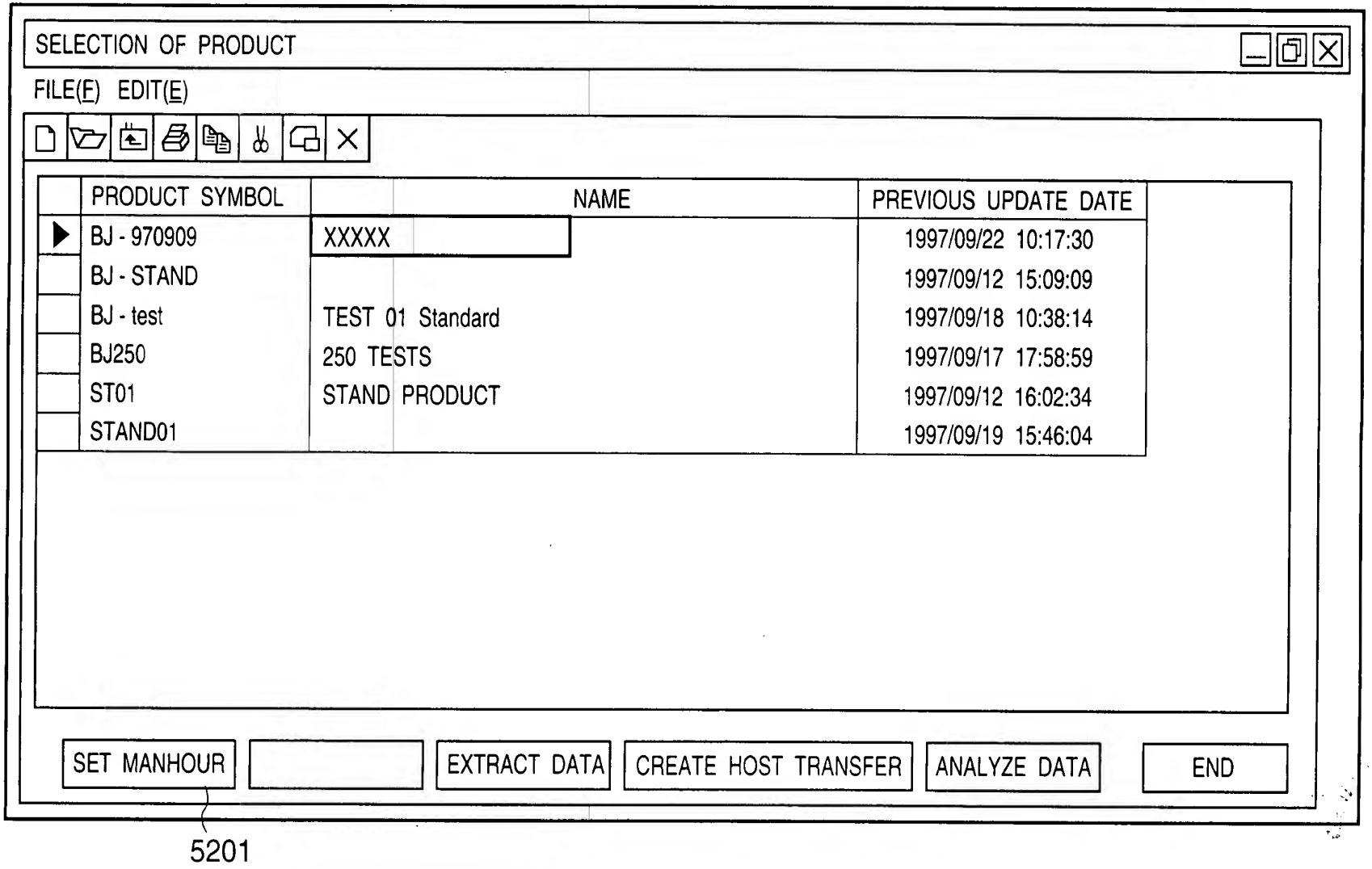

SELECTION OF PRODUCT
FILE(F) EDIT(E)
PRODUCT SYMBOL
NAME
PREVIOUS UPDATE DATE
BJ - 970909
XXXXX
1997/09/22 10:17:30
BJ - STAND
1997/09/12 15:09:09
BJ - test
TEST 01 Standard
1997/09/18 10:38:14
BJ250
250 TESTS
1997/09/17 17:58:59
ST01
STAND PRODUCT
1997/09/12 16:02:34
STAND01
1997/09/19 15:46:04
SET MANHOUR
EXTRACT DATA
CREATE HOST TRANSFER
ANALYZE DATA
END
5201

FIG. 53

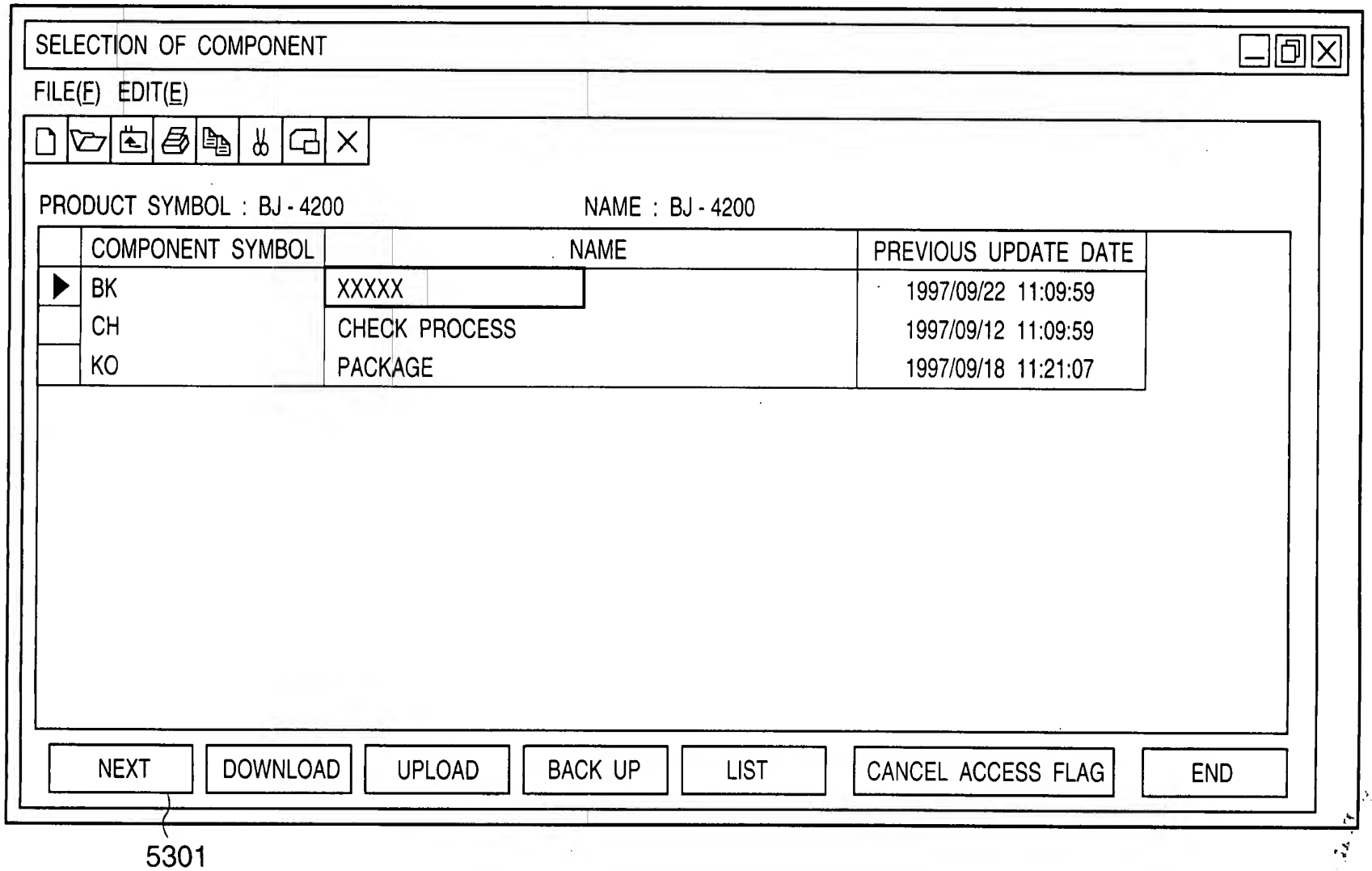

SELECTION OF COMPONENT
FILE(F) EDIT(E)
PRODUCT SYMBOL : BJ - 4200
NAME : BJ - 4200
COMPONENT SYMBOL
NAME
PREVIOUS UPDATE DATE
BK
XXXXX
1997/09/22 11:09:59
CH
CHECK PROCESS
1997/09/12 11:09:59
KO
PACKAGE
1997/09/18 11:21:07
NEXT
DOWNLOAD
UPLOAD
BACK UP
LIST
CANCEL ACCESS FLAG
END
5301

FIG. 54

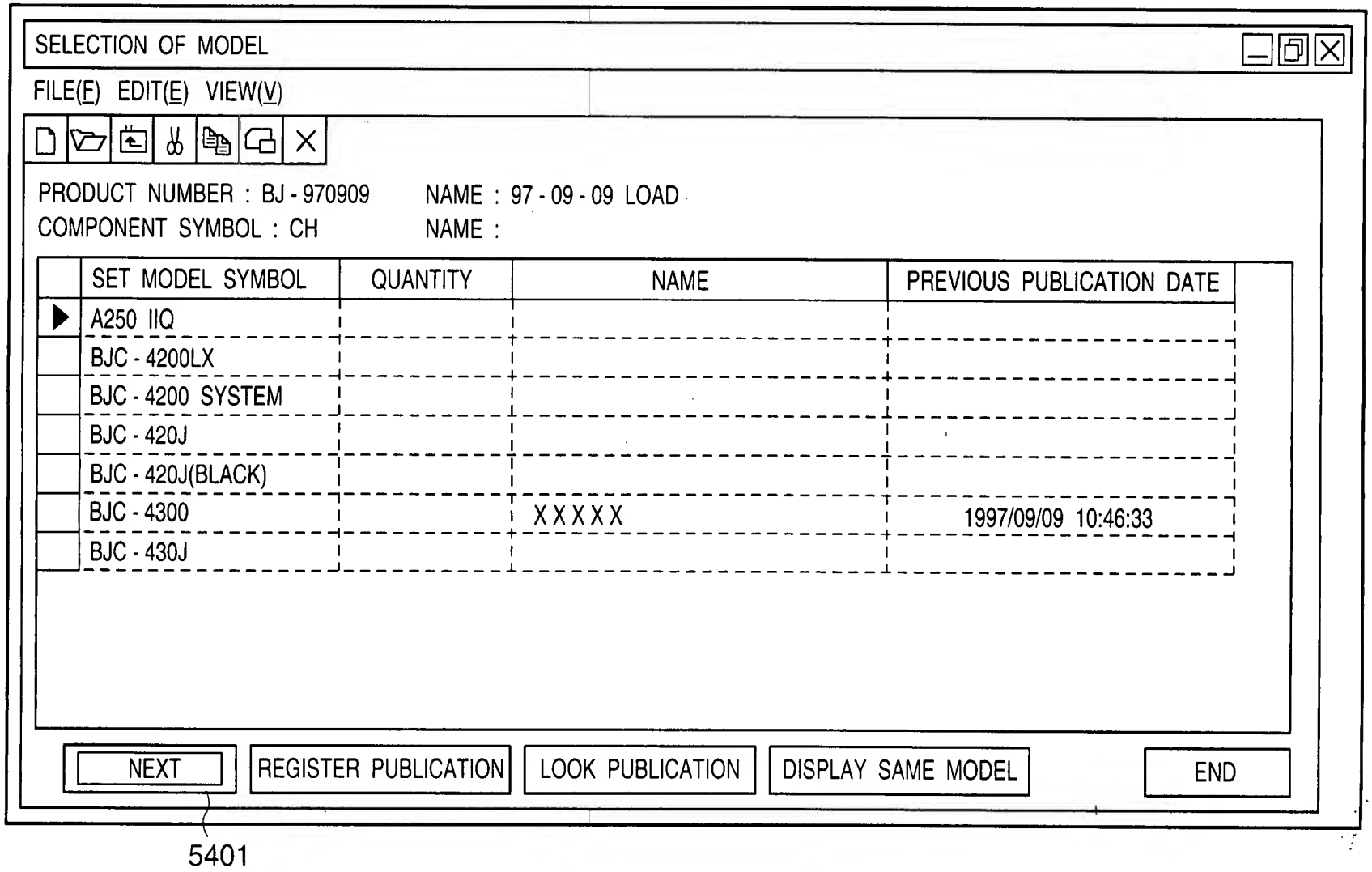

SELECTION OF MODEL
FILE(F) EDIT(E) VIEW(V)
PRODUCT NUMBER : BJ - 970909
NAME : 97 - 09 - 09 LOAD
COMPONENT SYMBOL : CH
NAME :
SET MODEL SYMBOL
QUANTITY
NAME
PREVIOUS PUBLICATION DATE
A250 IIQ
BJC - 4200LX
BJC - 4200 SYSTEM
BJC - 420J
BJC - 420J(BLACK)
BJC - 4300
XXXXX
1997/09/09 10:46:33
BJC - 430J
NEXT
REGISTER PUBLICATION
LOOK PUBLICATION
DISPLAY SAME MODEL
END
5401

FIG. 55

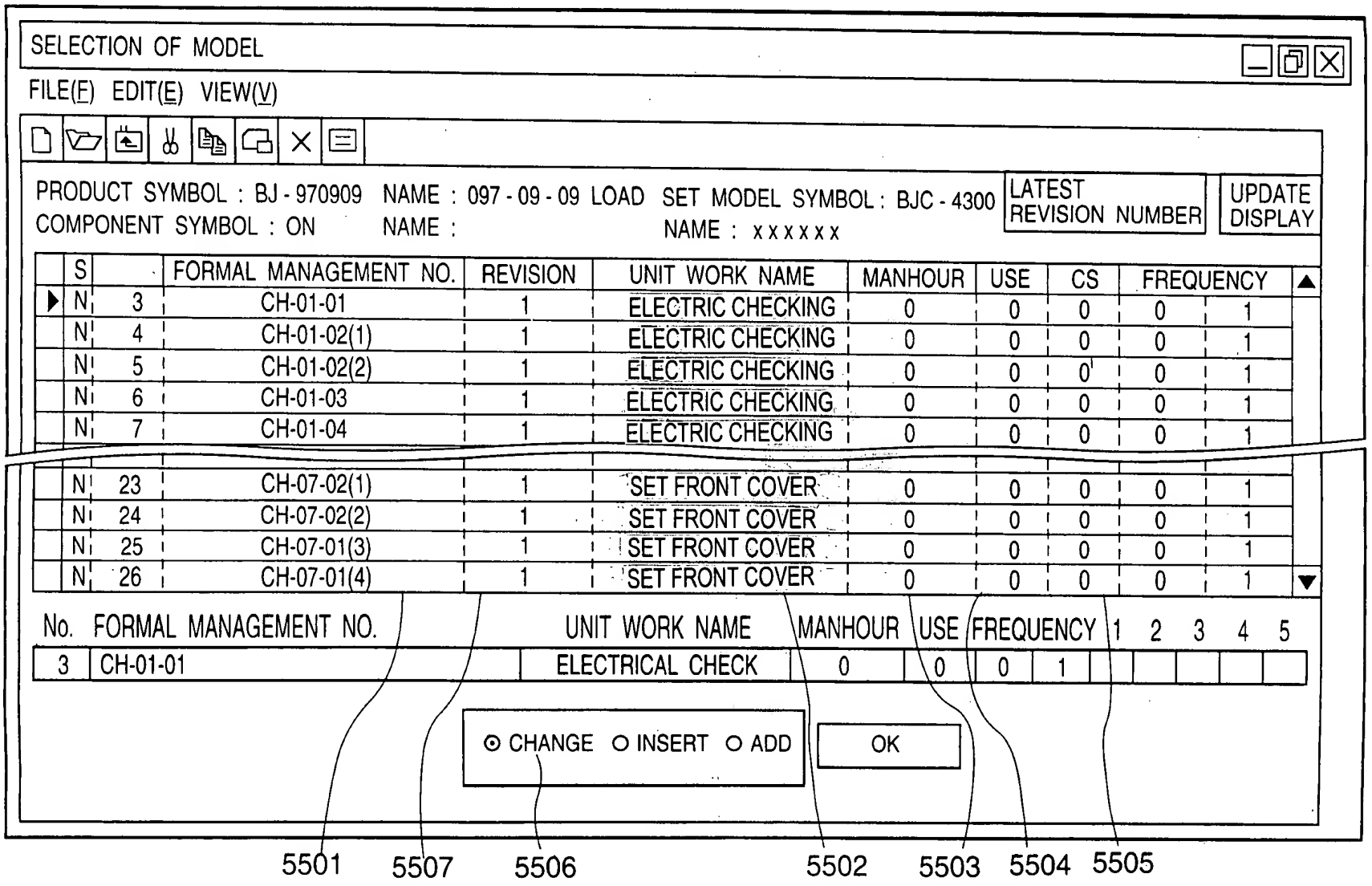

SELECTION OF MODEL
FILE(F) EDIT(E) VIEW(V)
PRODUCT SYMBOL : BJ - 970909 NAME : 097 - 09 - 09 LOAD SET MODEL SYMBOL : BJC - 4300
COMPONENT SYMBOL : ON NAME : NAME : xxxxxx
LATEST REVISION NUMBER
UPDATE DISPLAY
S | FORMAL MANAGEMENT NO. | REVISION | UNIT WORK NAME | MANHOUR | USE | CS | FREQUENCY
N 3 CH-01-01 1 ELECTRIC CHECKING 0 0 0 0 1
N 4 CH-01-02(1) 1 ELECTRIC CHECKING 0 0 0 0 1
N 5 CH-01-02(2) 1 ELECTRIC CHECKING 0 0 0 0 1
N 6 CH-01-03 1 ELECTRIC CHECKING 0 0 0 0 1
N 7 CH-01-04 1 ELECTRIC CHECKING 0 0 0 0 1
N 23 CH-07-02(1) 1 SET FRONT COVER 0 0 0 0 1
N 24 CH-07-02(2) 1 SET FRONT COVER 0 0 0 0 1
N 25 CH-07-01(3) 1 SET FRONT COVER 0 0 0 0 1
N 26 CH-07-01(4) 1 SET FRONT COVER 0 0 0 0 1
No. FORMAL MANAGEMENT NO. UNIT WORK NAME MANHOUR USE FREQUENCY 1 2 3 4 5
3 CH-01-01 ELECTRICAL CHECK 0 0 0 1
⊙ CHANGE ○ INSERT ○ ADD
OK
5501
5507
5506
5502
5503
5504
5505

FIG. 56

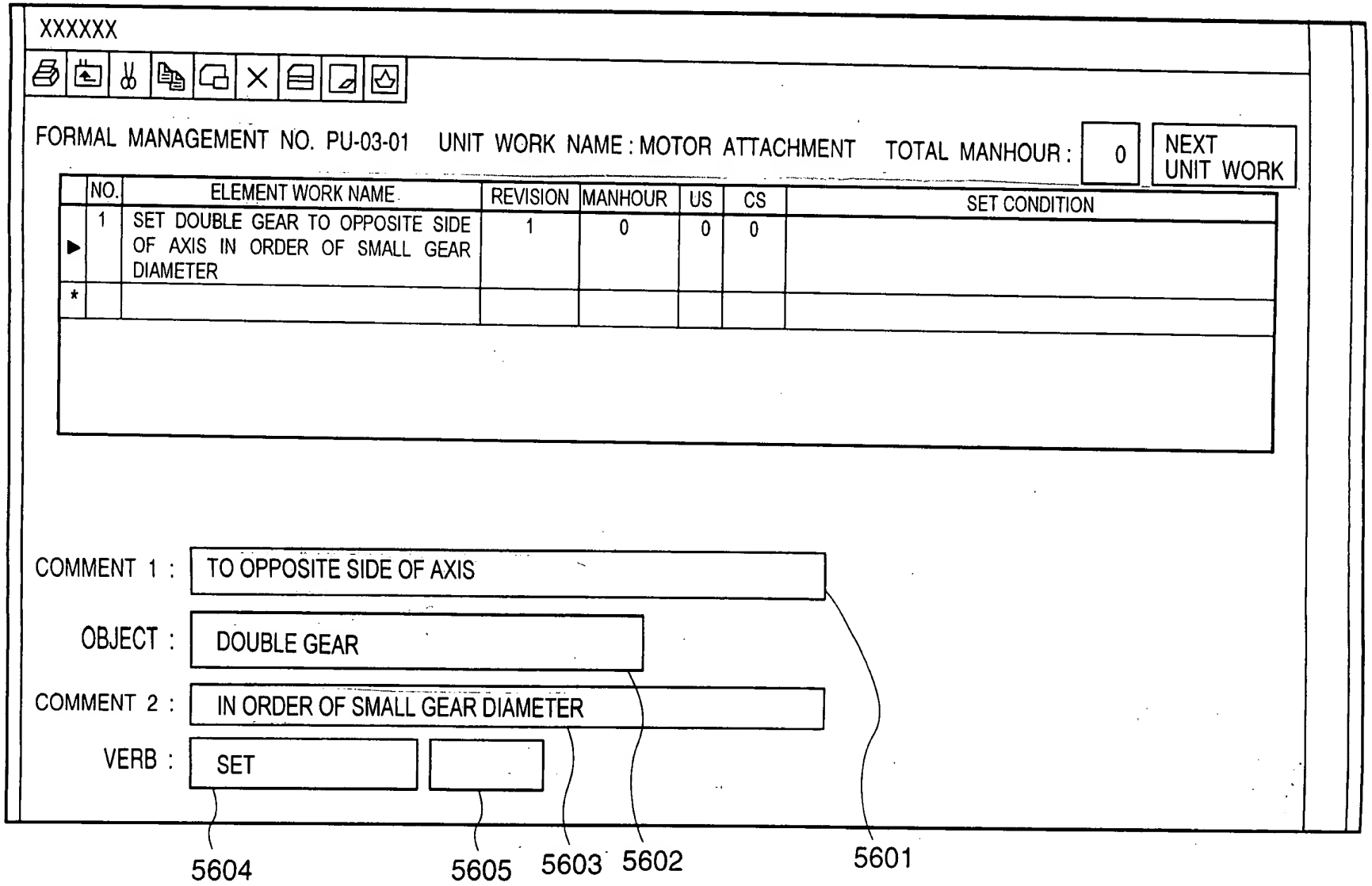
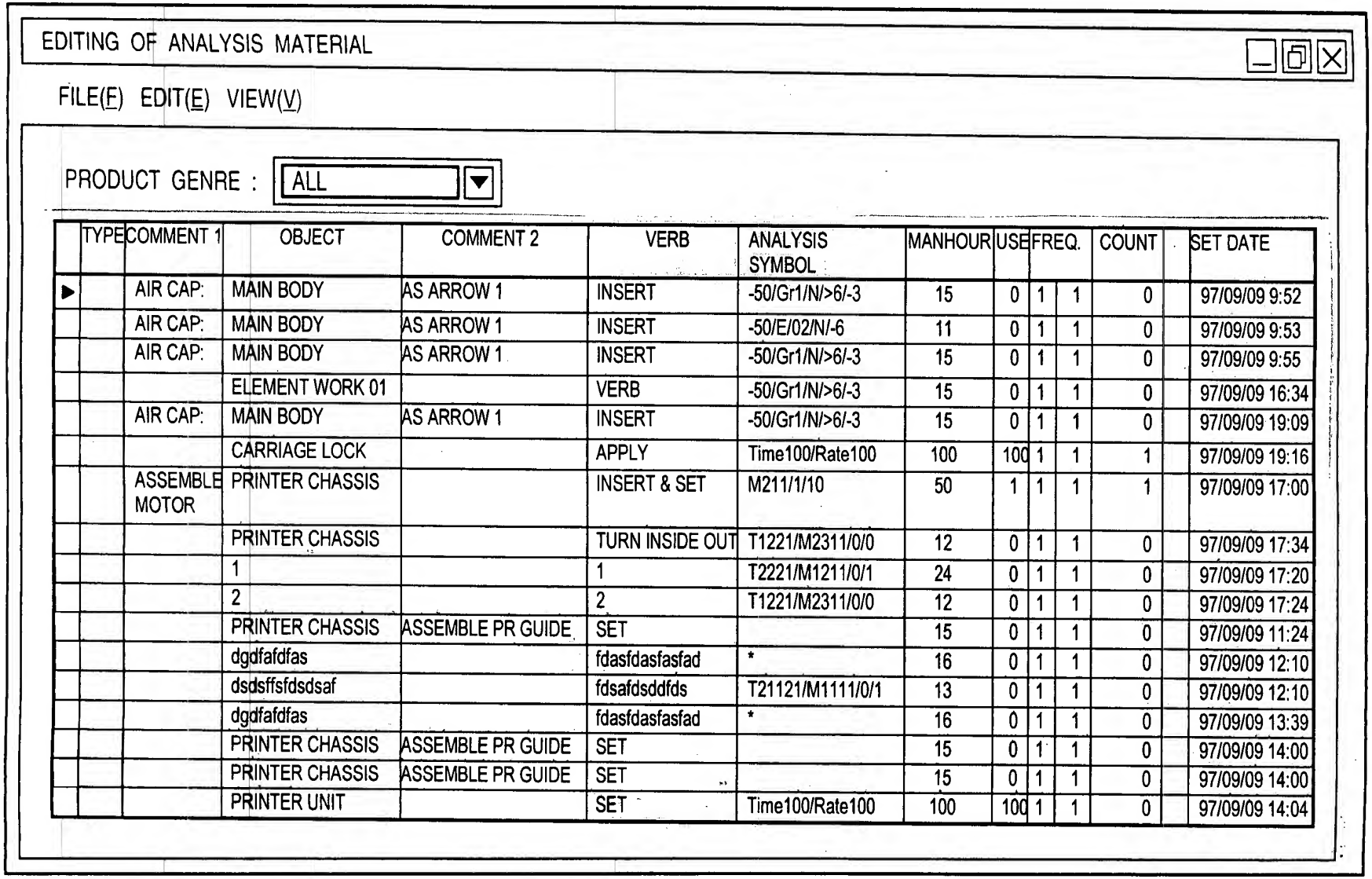

XXXXXX
FORMAL MANAGEMENT NO. PU-03-01
UNIT WORK NAME : MOTOR ATTACHMENT
TOTAL MANHOUR :
0
NEXT UNIT WORK
NO.
ELEMENT WORK NAME
REVISION
MANHOUR
US
CS
SET CONDITION
1
SET DOUBLE GEAR TO OPPOSITE SIDE OF AXIS IN ORDER OF SMALL GEAR DIAMETER
1
0
0
0
COMMENT 1 :
TO OPPOSITE SIDE OF AXIS
OBJECT :
DOUBLE GEAR
COMMENT 2 :
IN ORDER OF SMALL GEAR DIAMETER
VERB :
SET
5604
5605
5603
5602
5601

FIG. 57



	TYPE	COMMENT 1	OBJECT	COMMENT 2	VERB	ANALYSIS SYMBOL	MANHOUR	USE	FREQ.		COUNT		SET DATE
▶		AIR CAP:	MAIN BODY	AS ARROW 1	INSERT	-50/Gr1/N/>6/-3	15	0	1	1	0		97/09/09 9:52
		AIR CAP:	MAIN BODY	AS ARROW 1	INSERT	-50/E/02/N/-6	11	0	1	1	0		97/09/09 9:53
		AIR CAP:	MAIN BODY	AS ARROW 1	INSERT	-50/Gr1/N/>6/-3	15	0	1	1	0		97/09/09 9:55
			ELEMENT WORK 01		VERB	-50/Gr1/N/>6/-3	15	0	1	1	0		97/09/09 16:34
		AIR CAP:	MAIN BODY	AS ARROW 1	INSERT	-50/Gr1/N/>6/-3	15	0	1	1	0		97/09/09 19:09
			CARRIAGE LOCK		APPLY	Time100/Rate100	100	100	1	1	1		97/09/09 19:16
		ASSEMBLE MOTOR	PRINTER CHASSIS		INSERT & SET	M211/1/10	50	1	1	1	1		97/09/09 17:00
			PRINTER CHASSIS		TURN INSIDE OUT	T1221/M2311/0/0	12	0	1	1	0		97/09/09 17:34
			1		1	T2221/M1211/0/1	24	0	1	1	0		97/09/09 17:20
			2		2	T1221/M2311/0/0	12	0	1	1	0		97/09/09 17:24
			PRINTER CHASSIS	ASSEMBLE PR GUIDE	SET		15	0	1	1	0		97/09/09 11:24
			dgdfafdfas		fdasfdasfasfad	*	16	0	1	1	0		97/09/09 12:10
			dsdsffsfdsdsaf		fdsafdsddfds	T21121/M1111/0/1	13	0	1	1	0		97/09/09 12:10
			dgdfafdfas		fdasfdasfasfad	*	16	0	1	1	0		97/09/09 13:39
			PRINTER CHASSIS	ASSEMBLE PR GUIDE	SET		15	0	1	1	0		97/09/09 14:00
			PRINTER CHASSIS	ASSEMBLE PR GUIDE	SET		15	0	1	1	0		97/09/09 14:00
			PRINTER UNIT		SET	Time100/Rate100	100	100	1	1	0		97/09/09 14:04

FIG. 58

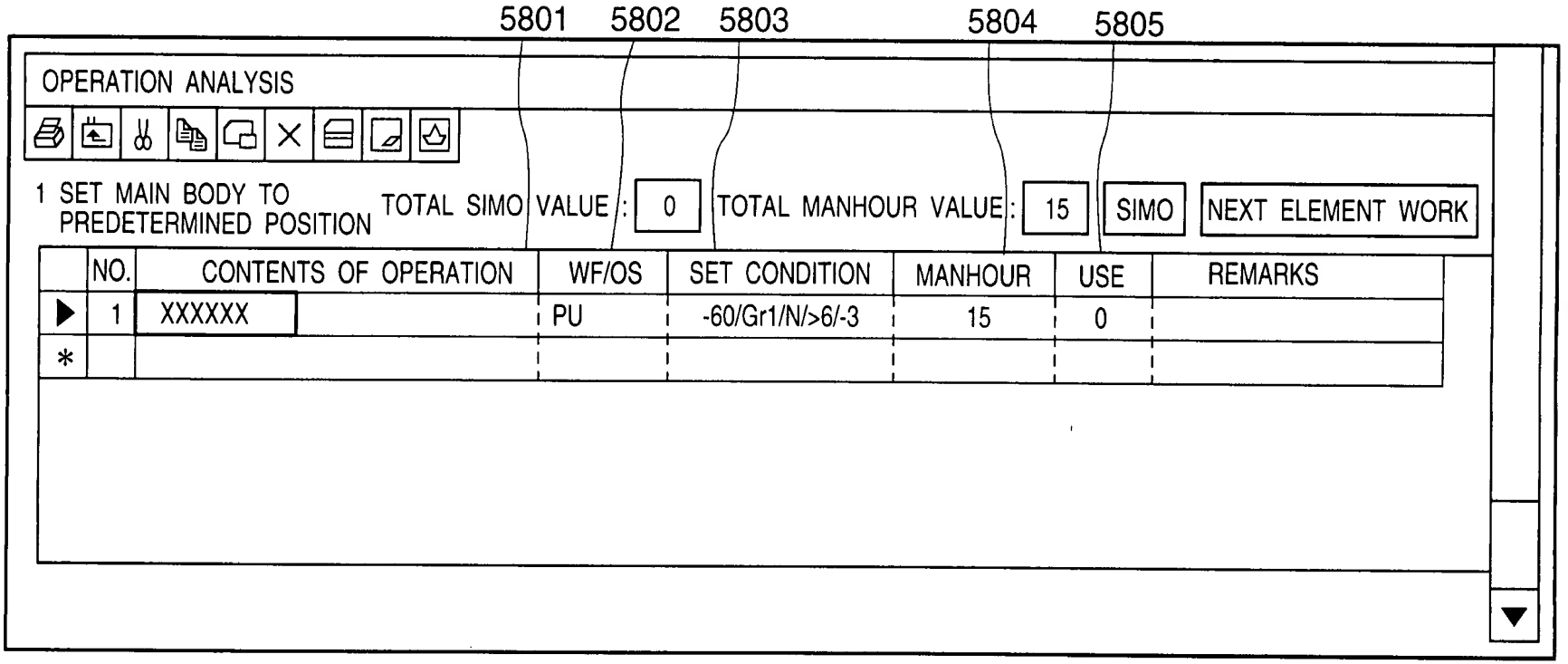

5801
5802
5803
5804
5805
OPERATION ANALYSIS
1 SET MAIN BODY TO PREDETERMINED POSITION
TOTAL SIMO VALUE :
0
TOTAL MANHOUR VALUE :
15
SIMO
NEXT ELEMENT WORK
NO.
CONTENTS OF OPERATION
WF/OS
SET CONDITION
MANHOUR
USE
REMARKS
1
XXXXXX
PU
-60/Gr1/N/>6/-3
15
0

FIG. 59

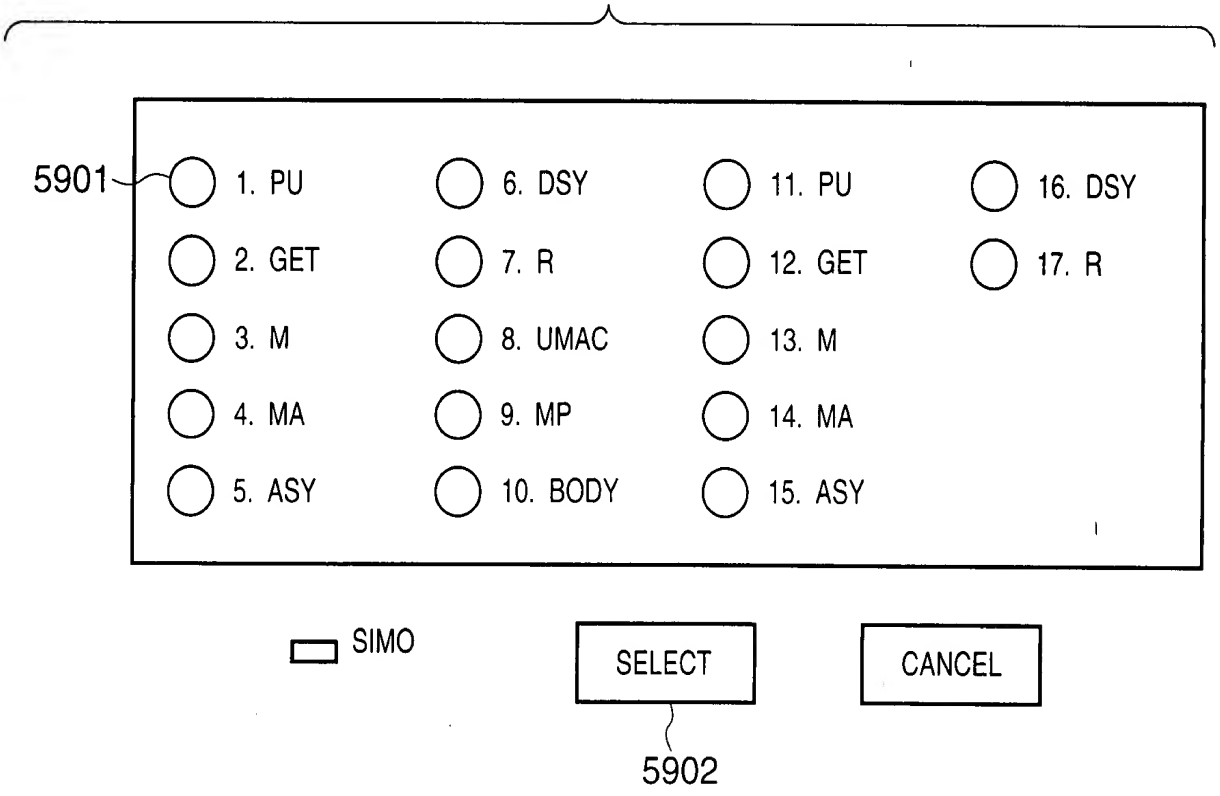

5901
1. PU
6. DSY
11. PU
16. DSY
2. GET
7. R
12. GET
17. R
3. M
8. UMAC
13. M
4. MA
9. MP
14. MA
5. ASY
10. BODY
15. ASY
SIMO
SELECT
CANCEL
5902

FIG. 60

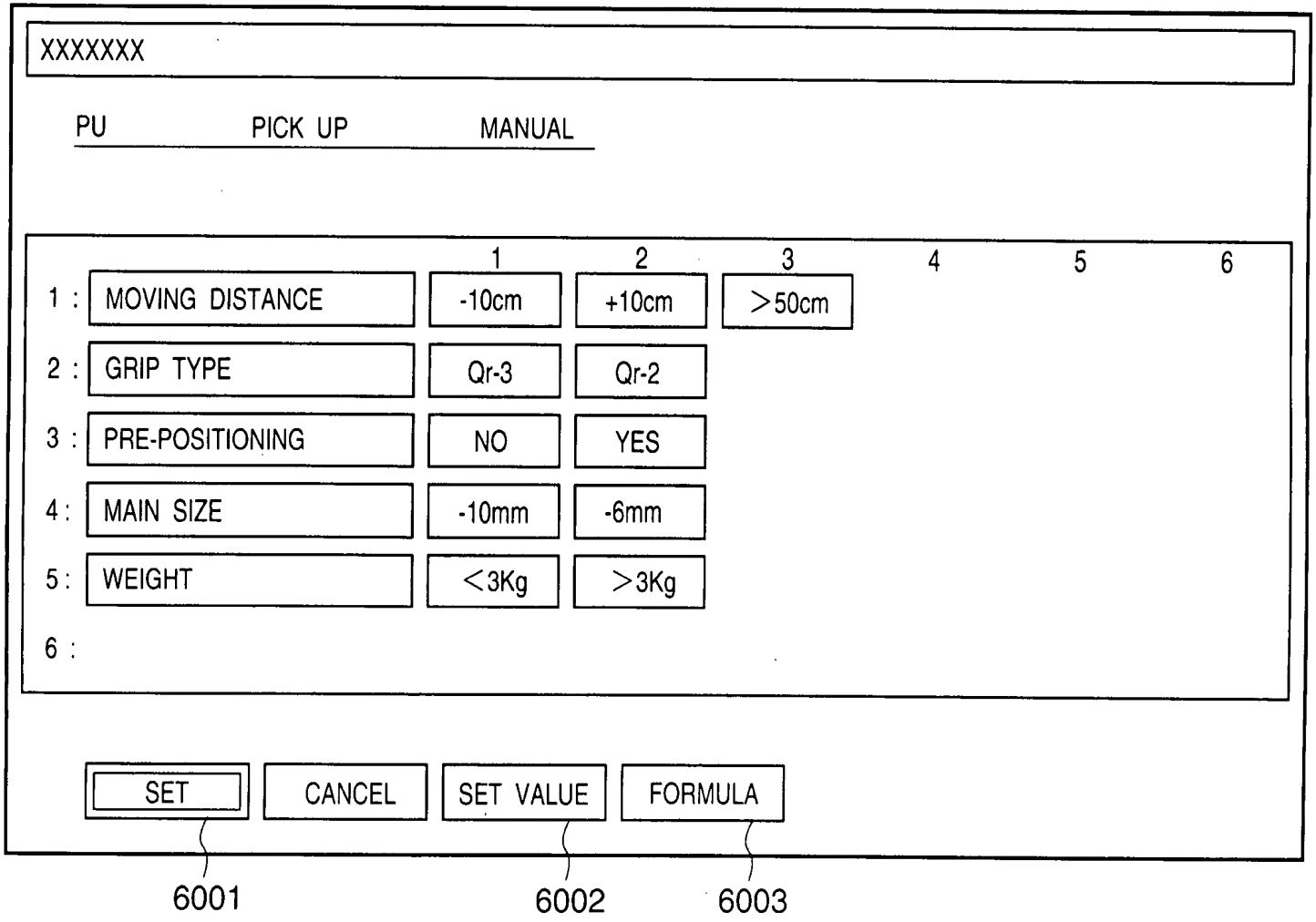


FIG. 61

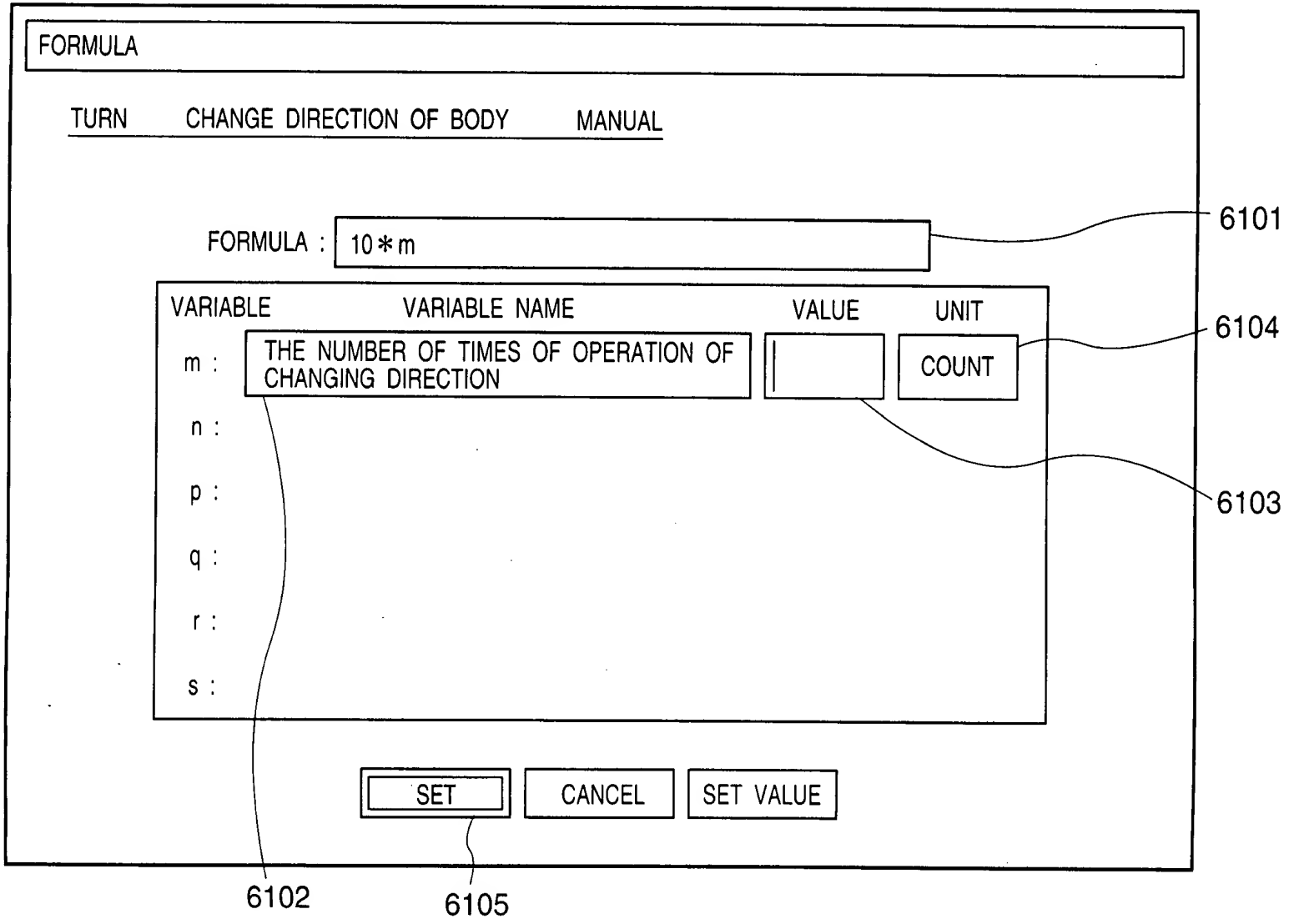

FORMULA
TURN
CHANGE DIRECTION OF BODY
MANUAL
FORMULA :
10 * m
6101
VARIABLE
VARIABLE NAME
VALUE
UNIT
m :
THE NUMBER OF TIMES OF OPERATION OF CHANGING DIRECTION
COUNT
6104
n :
p :
q :
r :
s :
6103
SET
CANCEL
SET VALUE
6102
6105

FIG. 62

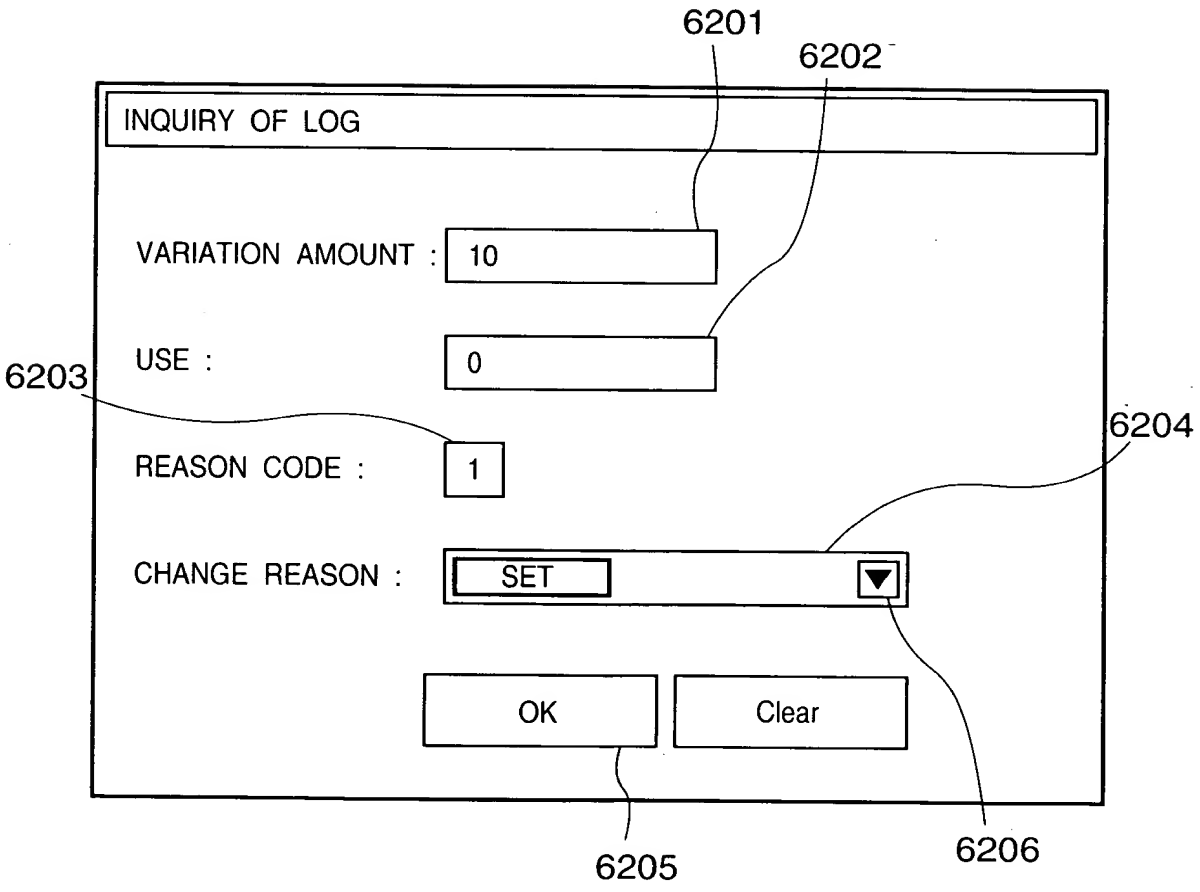

6201
6202
INQUIRY OF LOG
VARIATION AMOUNT :
10
USE :
0
6203
REASON CODE :
1
6204
CHANGE REASON :
SET
OK
Clear
6205
6206

FIG. 63

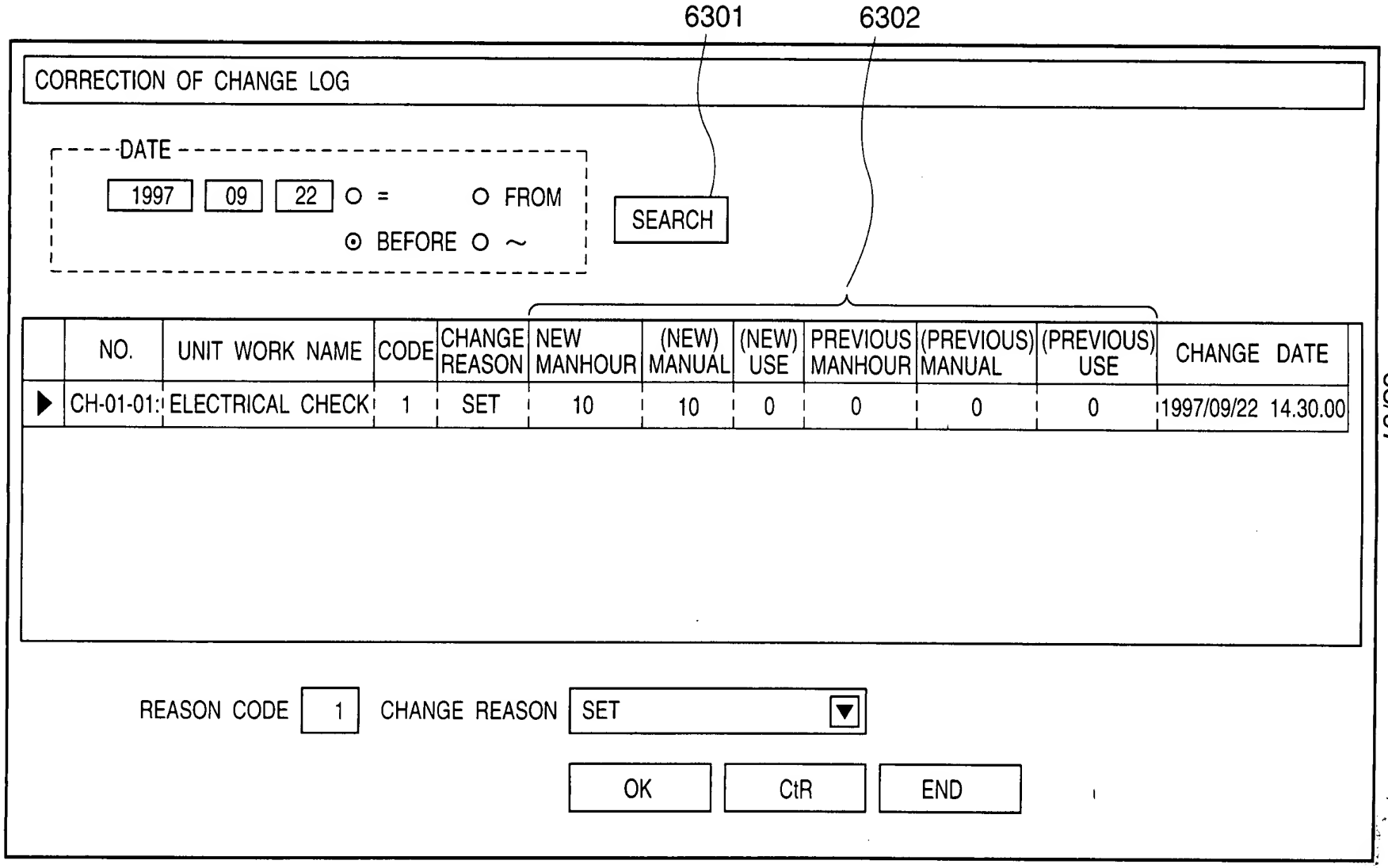

6301
6302
CORRECTION OF CHANGE LOG
DATE
1997
09
22
O =
O FROM
⊙ BEFORE
O ~
SEARCH
NO.
UNIT WORK NAME
CODE
CHANGE REASON
NEW MANHOUR
(NEW) MANUAL
(NEW) USE
PREVIOUS MANHOUR
(PREVIOUS) MANUAL
(PREVIOUS) USE
CHANGE DATE
CH-01-01:
ELECTRICAL CHECK
1
SET
10
10
0
0
0
0
1997/09/22 14.30.00
REASON CODE
1
CHANGE REASON
SET
OK
CtR
END

FIG. 64

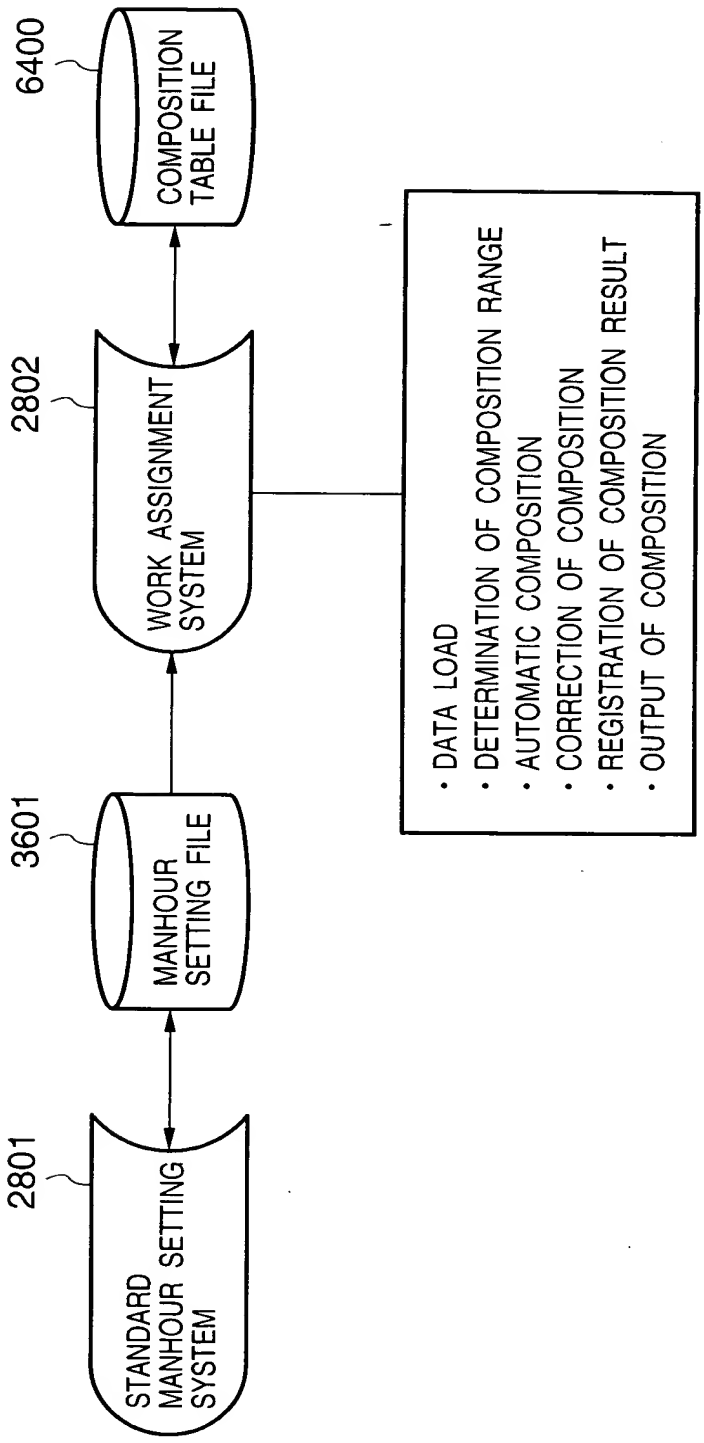

6400
COMPOSITION TABLE FILE
2802
WORK ASSIGNMENT SYSTEM
3601
MANHOUR SETTING FILE
2801
STANDARD MANHOUR SETTING SYSTEM
• DATA LOAD
• DETERMINATION OF COMPOSITION RANGE
• AUTOMATIC COMPOSITION
• CORRECTION OF COMPOSITION
• REGISTRATION OF COMPOSITION RESULT
• OUTPUT OF COMPOSITION

FIG. 65

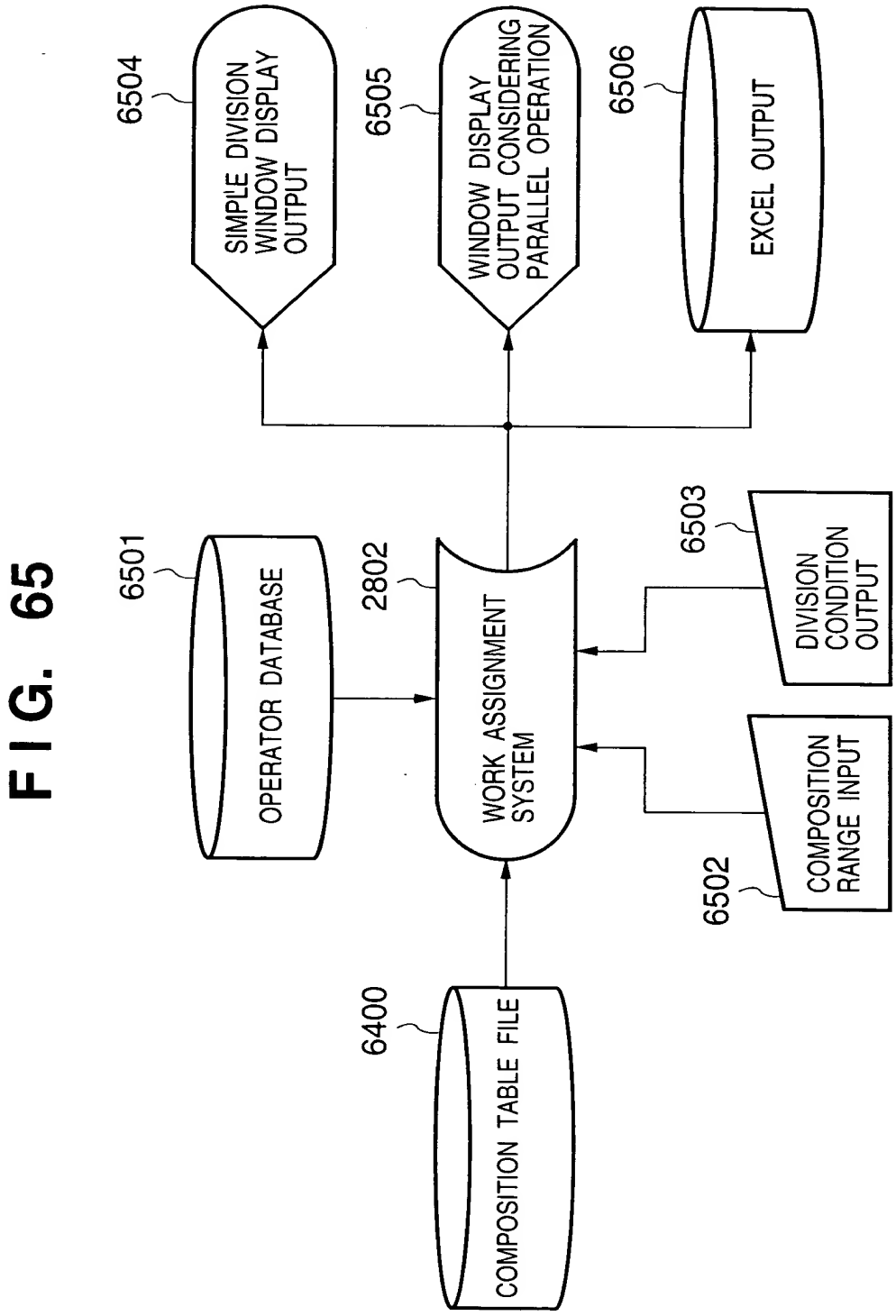

6504
SIMPLE DIVISION WINDOW DISPLAY OUTPUT
6505
WINDOW DISPLAY OUTPUT CONSIDERING PARALLEL OPERATION
6506
EXCEL OUTPUT
6501
OPERATOR DATABASE
2802
WORK ASSIGNMENT SYSTEM
6503
DIVISION CONDITION OUTPUT
6502
COMPOSITION RANGE INPUT
6400
COMPOSITION TABLE FILE

FIG. 66

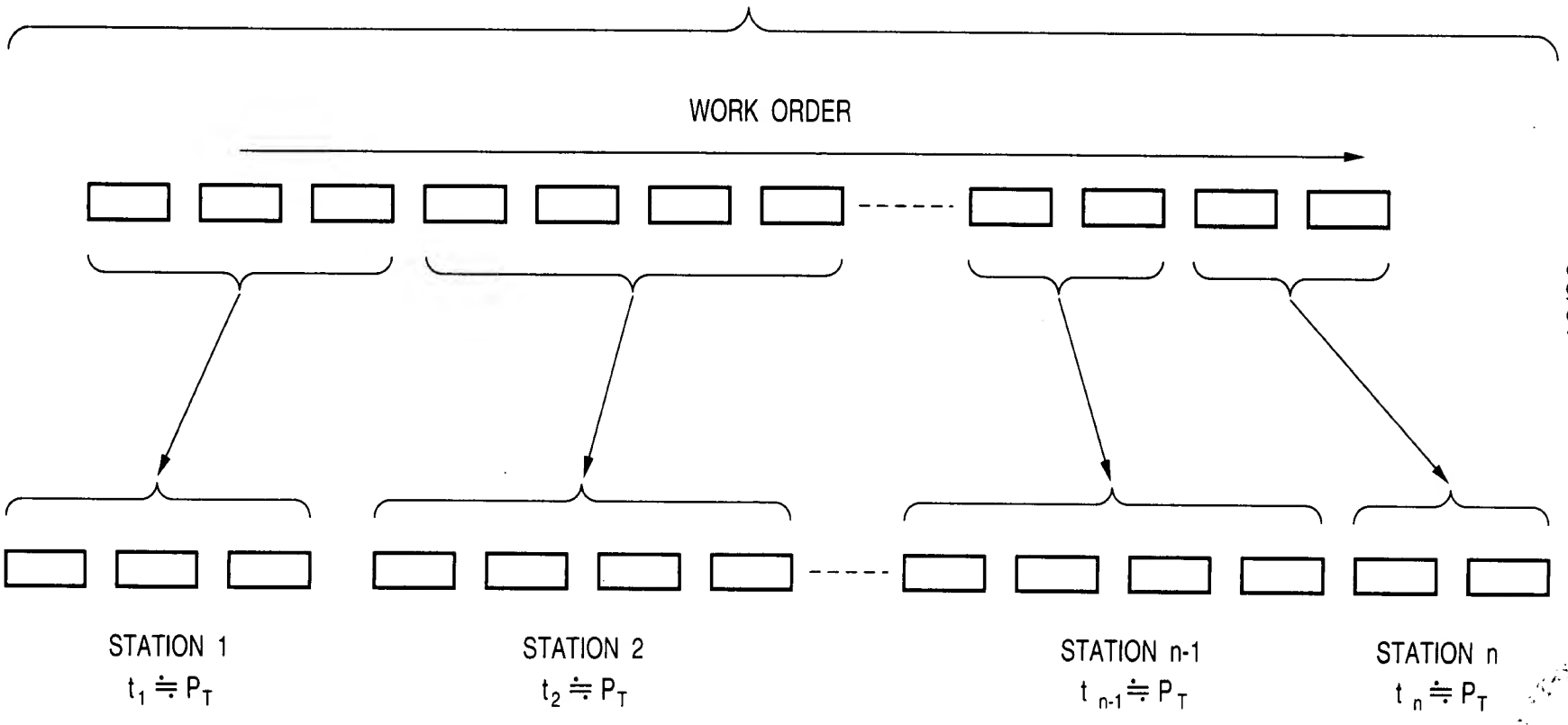


FIG. 67

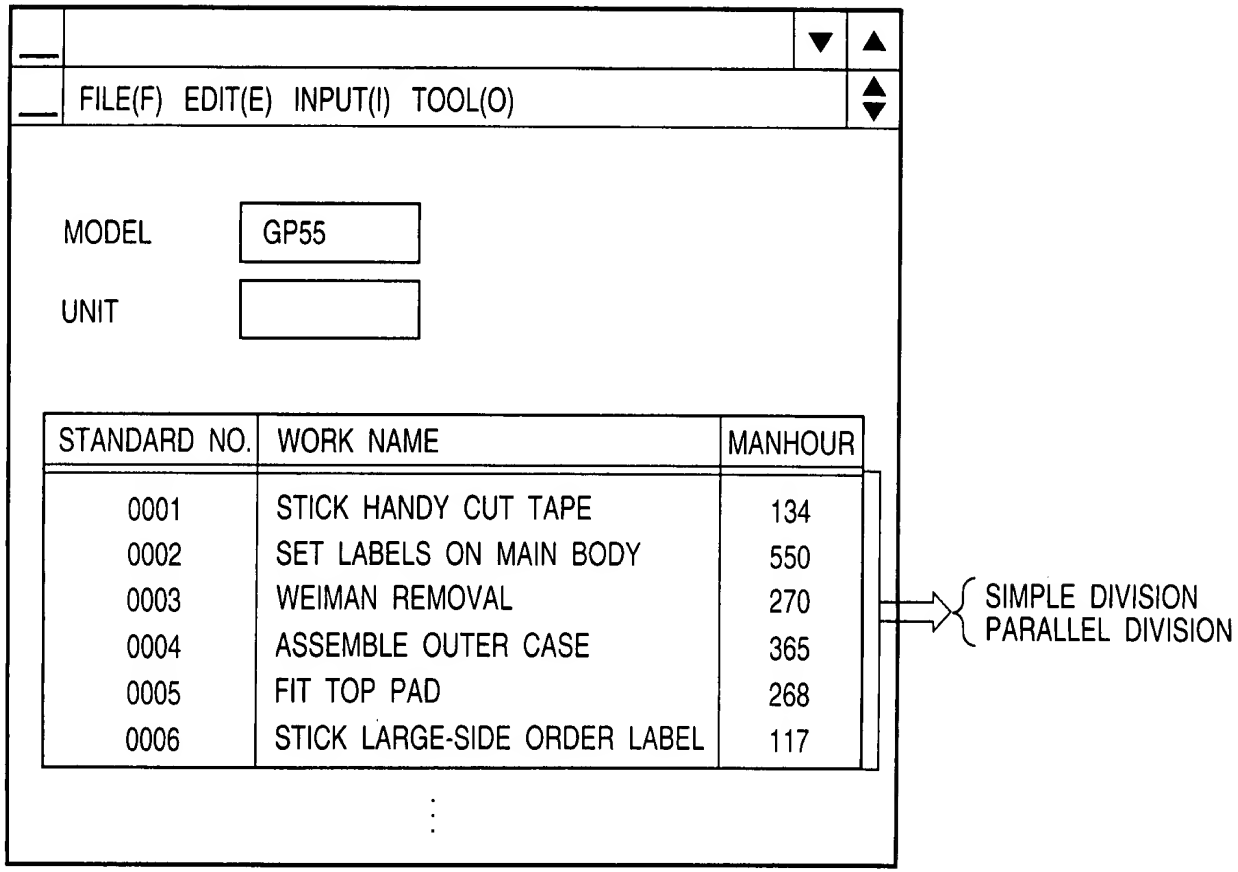


FIG. 68

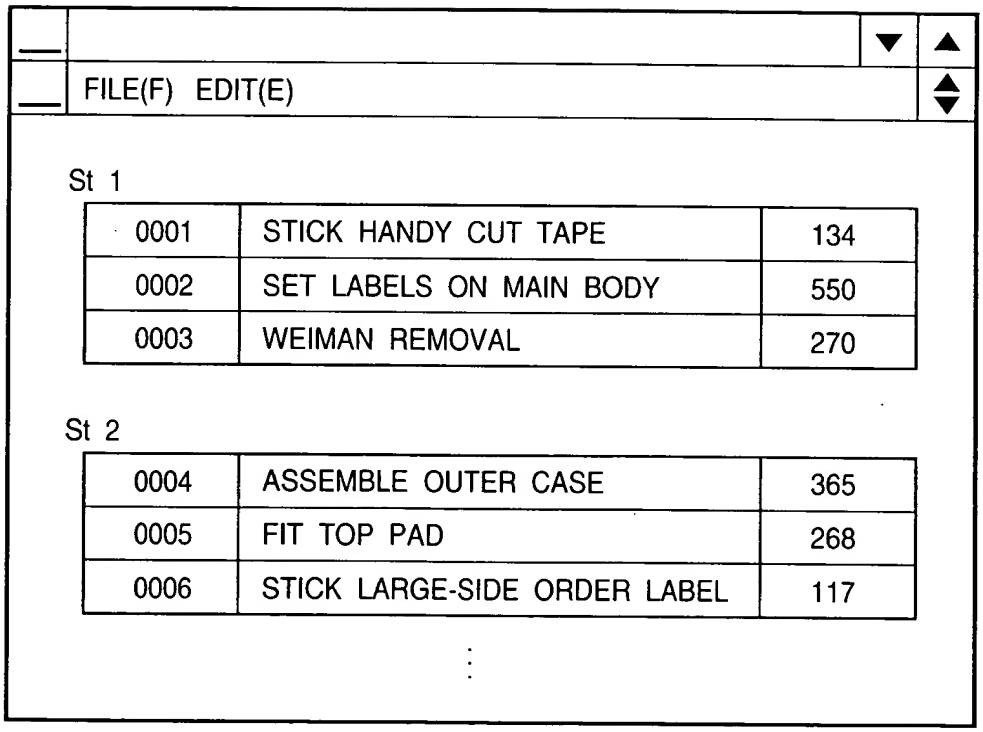

SIMPLE DIVISION
FILE(F) EDIT(E)
St 1
0001 STICK HANDY CUT TAPE 134
0002 SET LABELS ON MAIN BODY 550
0003 WEIMAN REMOVAL 270
St 2
0004 ASSEMBLE OUTER CASE 365
0005 FIT TOP PAD 268
0006 STICK LARGE-SIDE ORDER LABEL 117

FIG. 69

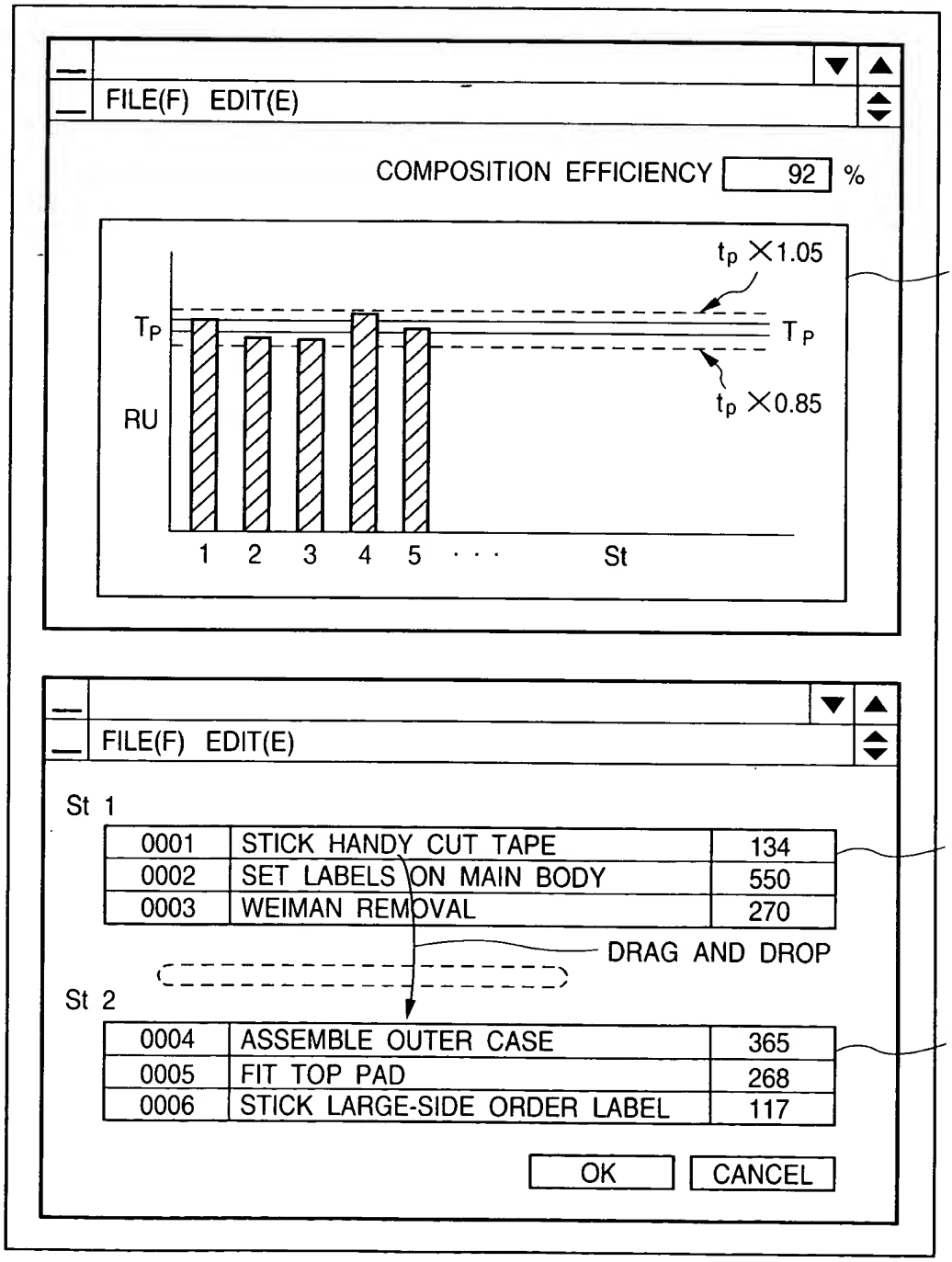

FILE(F) EDIT(E)
COMPOSITION EFFICIENCY 92 %
tp ×1.05
TP
TP
RU
tp ×0.85
1 2 3 4 5 · · · St
6901
FILE(F) EDIT(E)
St 1
0001 STICK HANDY CUT TAPE 134
0002 SET LABELS ON MAIN BODY 550
0003 WEIMAN REMOVAL 270
6902
DRAG AND DROP
St 2
0004 ASSEMBLE OUTER CASE 365
0005 FIT TOP PAD 268
0006 STICK LARGE-SIDE ORDER LABEL 117
6903
OK
CANCEL

FIG. 70

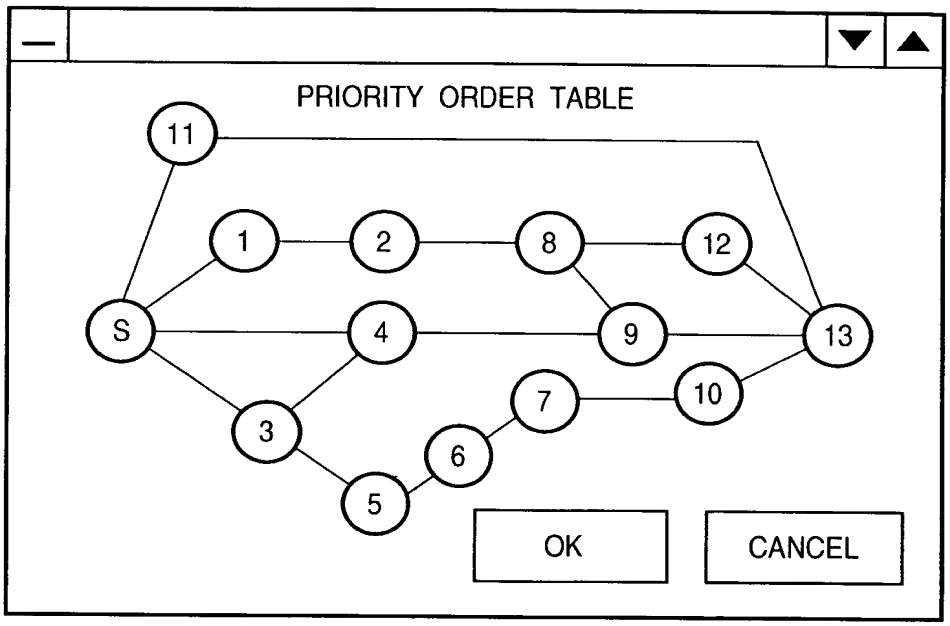


FIG. 71

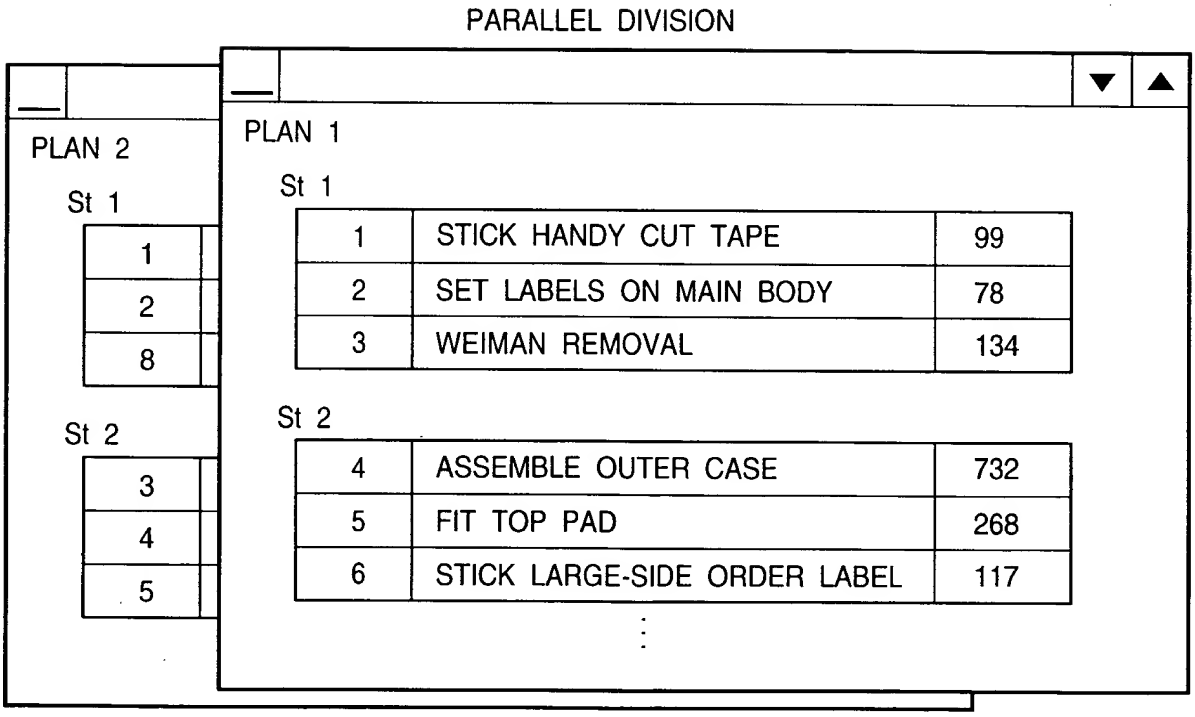

PARALLEL DIVISION
PLAN 2
St 1
1
2
8
St 2
3
4
5
PLAN 1
St 1
1 STICK HANDY CUT TAPE 99
2 SET LABELS ON MAIN BODY 78
3 WEIMAN REMOVAL 134
St 2
4 ASSEMBLE OUTER CASE 732
5 FIT TOP PAD 268
6 STICK LARGE-SIDE ORDER LABEL 117

FIG. 72

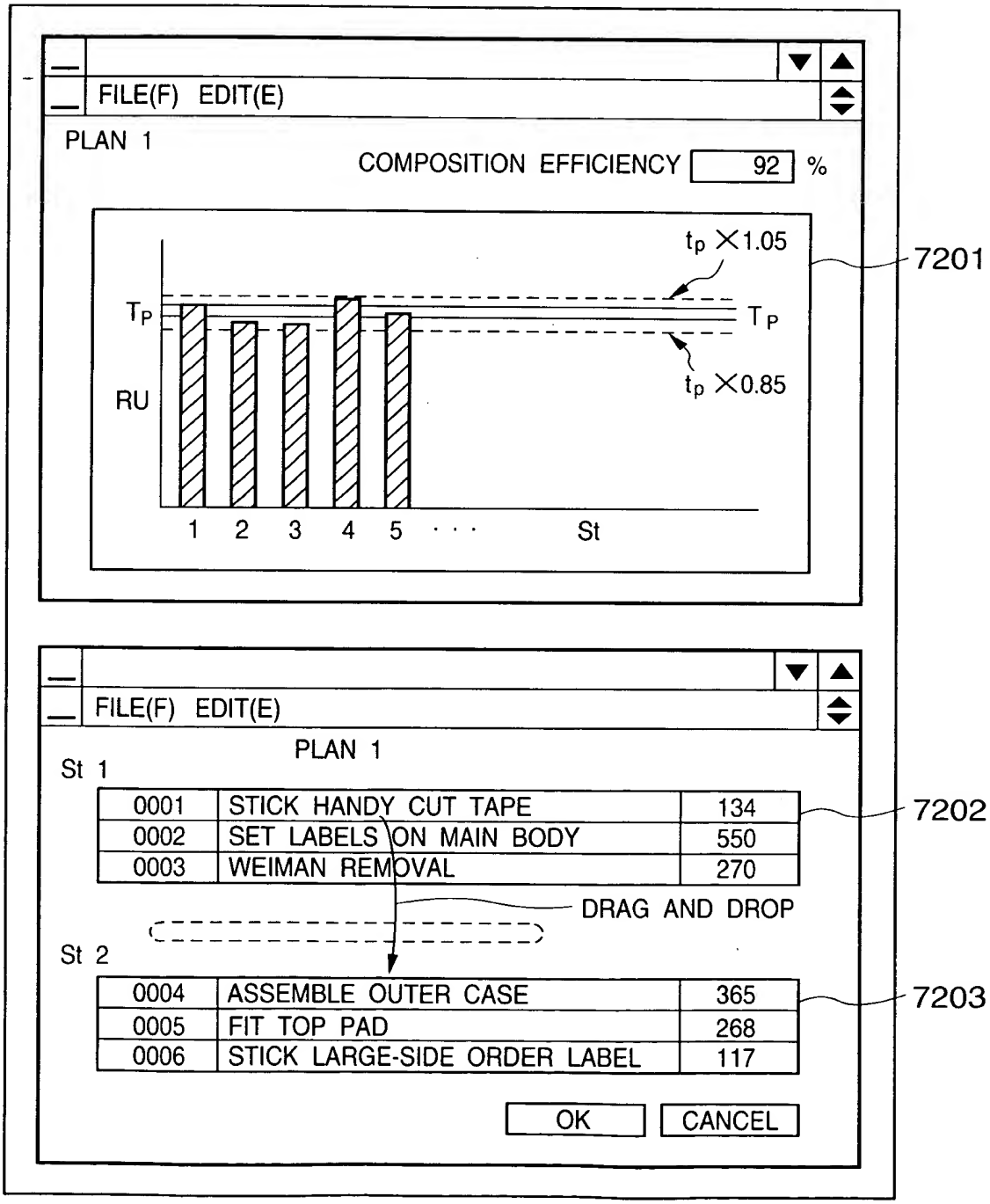

FILE(F) EDIT(E)
PLAN 1
COMPOSITION EFFICIENCY 92 %
$t_p \times 1.05$
T_P
T_P
RU
$t_p \times 0.85$
1 2 3 4 5 · · · St
7201
FILE(F) EDIT(E)
PLAN 1
St 1
0001 STICK HANDY CUT TAPE 134
0002 SET LABELS ON MAIN BODY 550
0003 WEIMAN REMOVAL 270
7202
DRAG AND DROP
St 2
0004 ASSEMBLE OUTER CASE 365
0005 FIT TOP PAD 268
0006 STICK LARGE-SIDE ORDER LABEL 117
7203
OK
CANCEL

FIG. 73

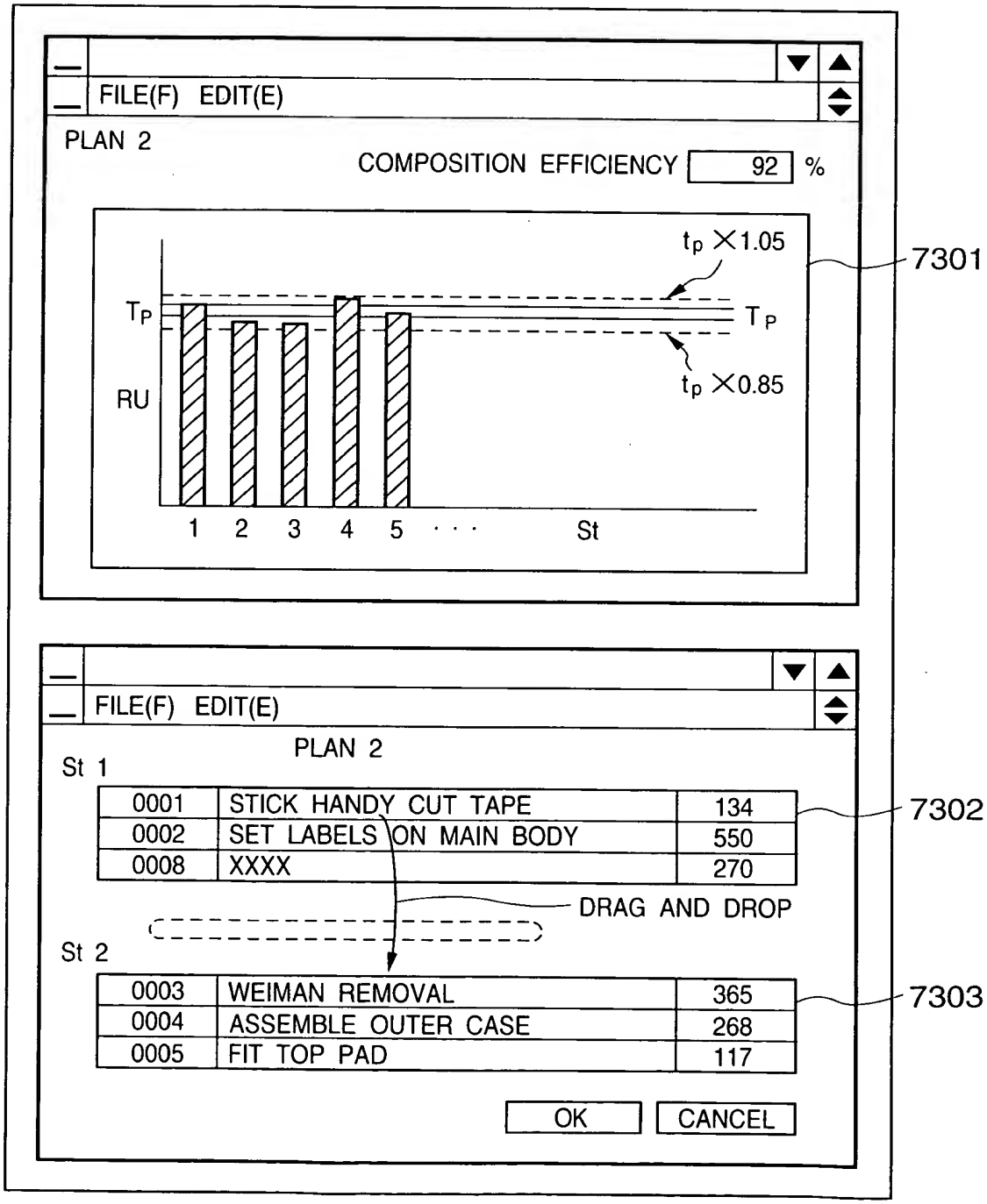

FILE(F) EDIT(E)
PLAN 2
COMPOSITION EFFICIENCY 92 %
tp ×1.05
TP
TP
tp ×0.85
RU
1 2 3 4 5 · · · St
7301
FILE(F) EDIT(E)
PLAN 2
St 1
0001 STICK HANDY CUT TAPE 134
0002 SET LABELS ON MAIN BODY 550
0008 XXXX 270
7302
DRAG AND DROP
St 2
0003 WEIMAN REMOVAL 365
0004 ASSEMBLE OUTER CASE 268
0005 FIT TOP PAD 117
7303
OK
CANCEL

FIG. 74

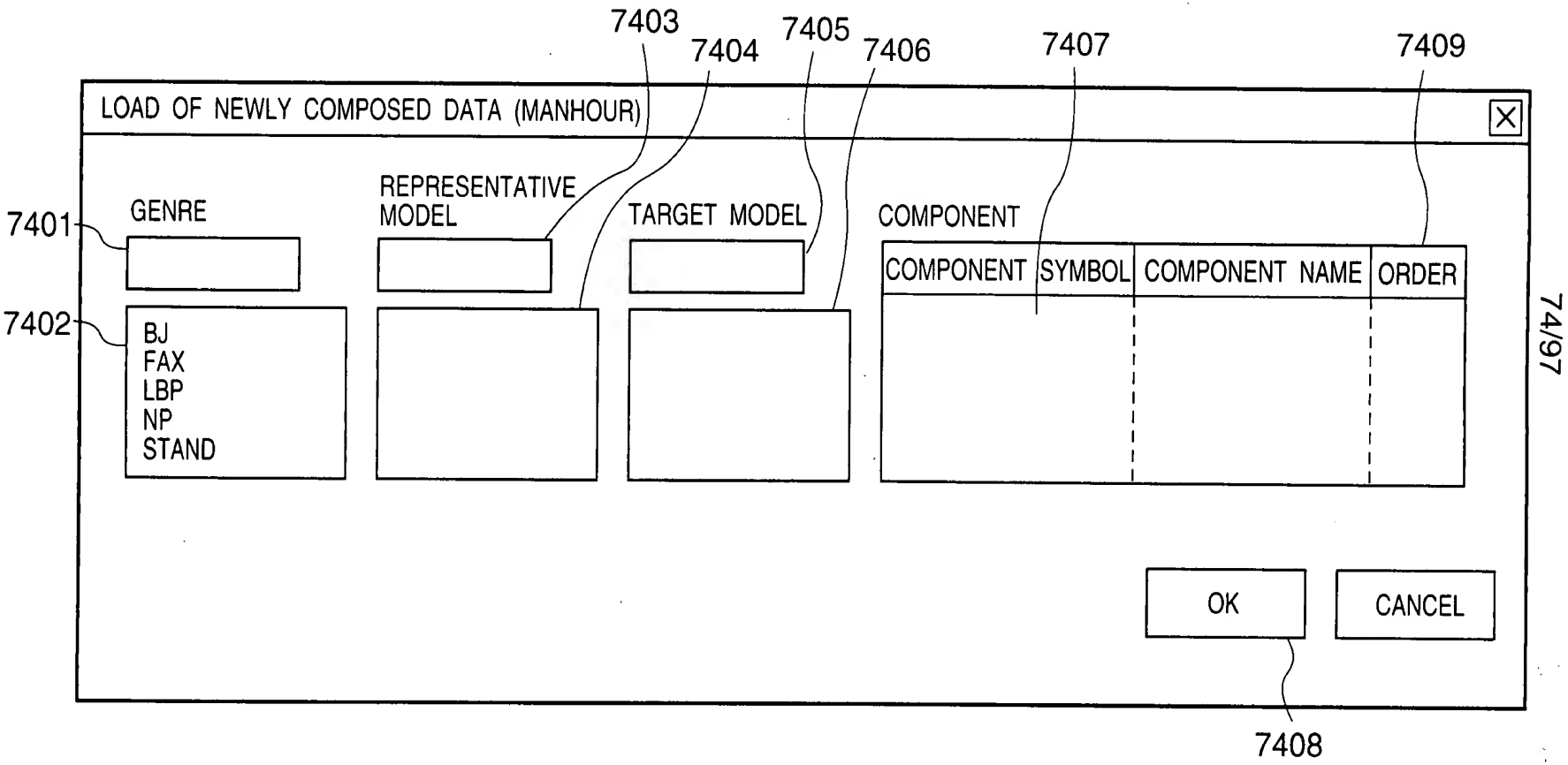

7403
7404
7405
7406
7407
7409
LOAD OF NEWLY COMPOSED DATA (MANHOUR)
7401
GENRE
REPRESENTATIVE MODEL
TARGET MODEL
COMPONENT
7402
BJ
FAX
LBP
NP
STAND
COMPONENT
SYMBOL
COMPONENT NAME
ORDER
OK
CANCEL
7408

FIG. 75

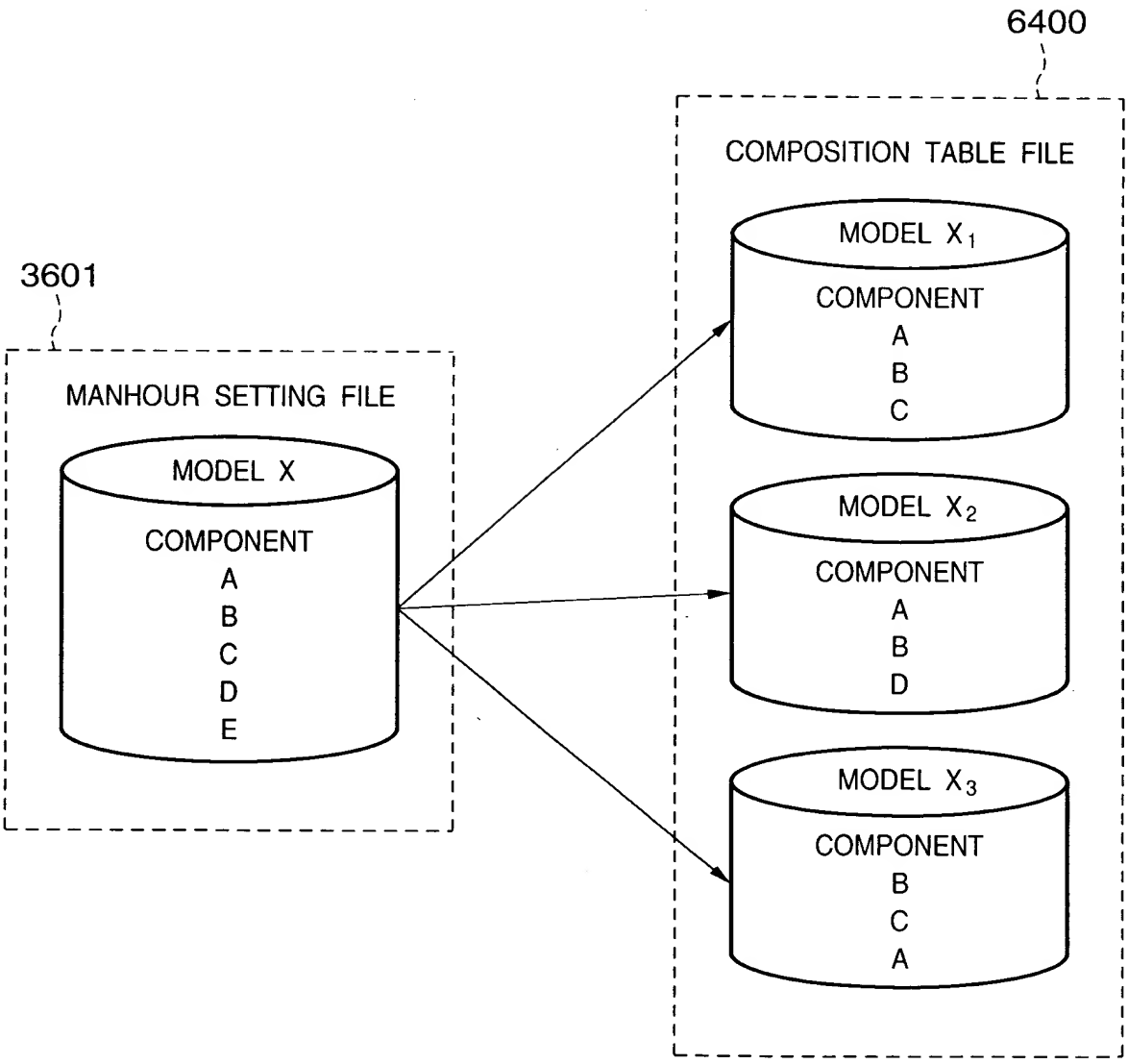

6400
COMPOSITION TABLE FILE
MODEL X1
COMPONENT
A
B
C
MODEL X2
COMPONENT
A
B
D
MODEL X3
COMPONENT
B
C
A
3601
MANHOUR SETTING FILE
MODEL X
COMPONENT
A
B
C
D
E

FIG. 76

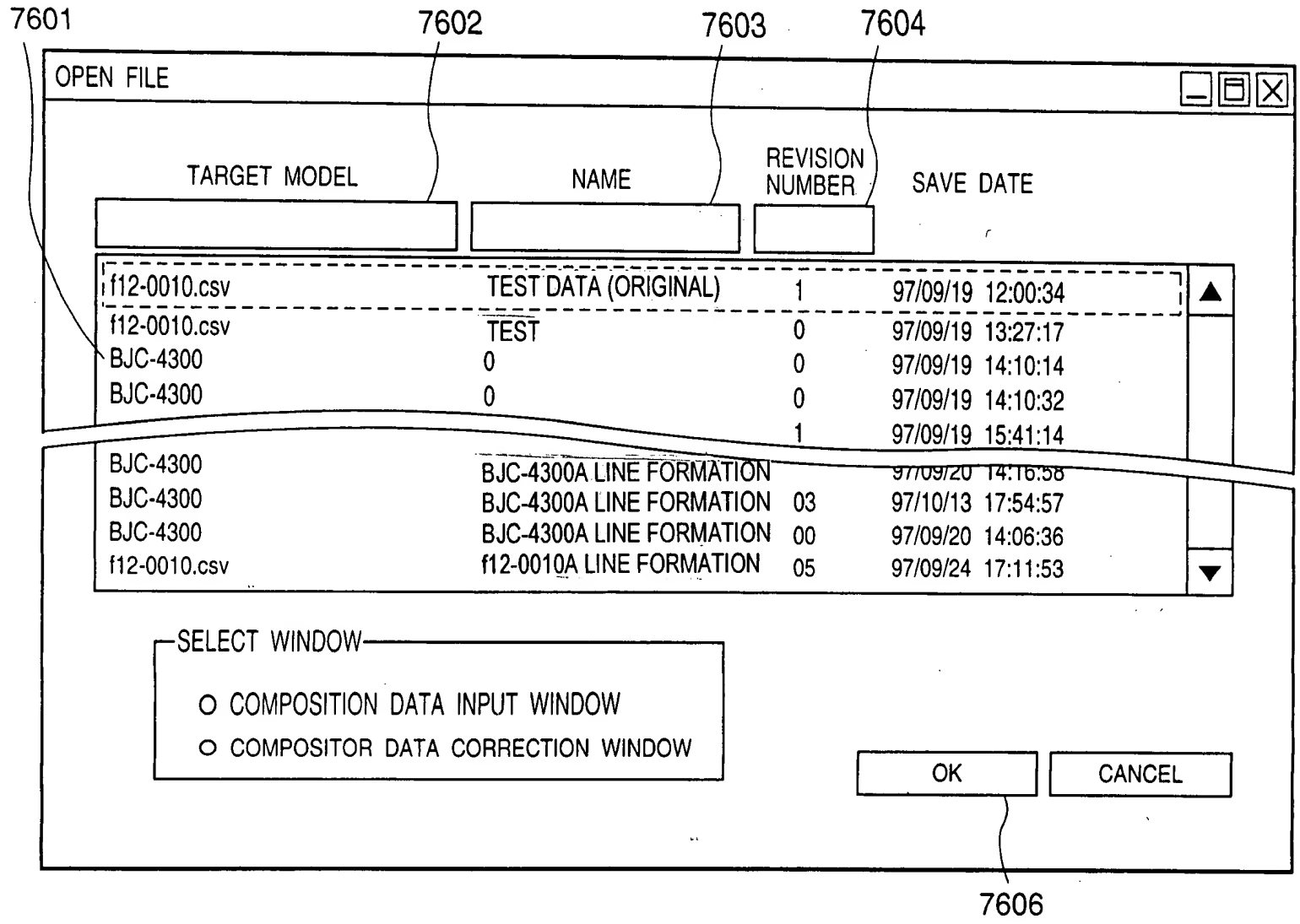

7601
7602
7603
7604
OPEN FILE
TARGET MODEL
NAME
REVISION NUMBER
SAVE DATE
f12-0010.csv TEST DATA (ORIGINAL) 1 97/09/19 12:00:34
f12-0010.csv TEST 0 97/09/19 13:27:17
BJC-4300 0 0 97/09/19 14:10:14
BJC-4300 0 0 97/09/19 14:10:32
1 97/09/19 15:41:14
BJC-4300 BJC-4300A LINE FORMATION
BJC-4300 BJC-4300A LINE FORMATION 03 97/10/13 17:54:57
BJC-4300 BJC-4300A LINE FORMATION 00 97/09/20 14:06:36
f12-0010.csv f12-0010A LINE FORMATION 05 97/09/24 17:11:53
SELECT WINDOW
O COMPOSITION DATA INPUT WINDOW
O COMPOSITOR DATA CORRECTION WINDOW
OK
CANCEL
7606

FIG. 77

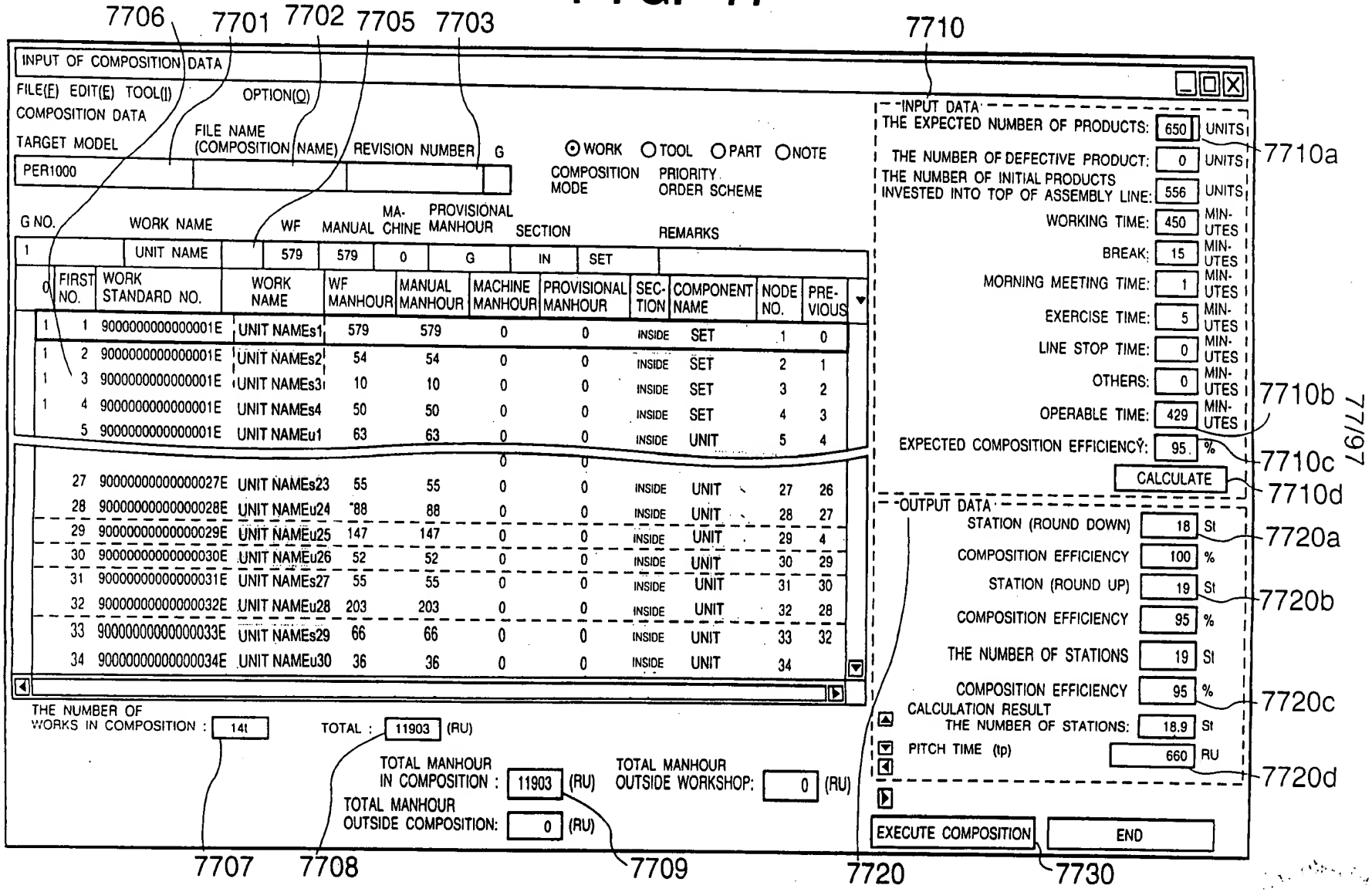

7706
7701
7702
7705
7703
7710
INPUT OF COMPOSITION DATA
FILE(F) EDIT(E) TOOL(I) OPTION(O)
COMPOSITION DATA
TARGET MODEL
FILE NAME (COMPOSITION NAME)
REVISION NUMBER
G
PER1000
WORK
TOOL
PART
NOTE
COMPOSITION MODE
PRIORITY ORDER SCHEME
G NO.
WORK NAME
WF MANUAL
MA-CHINE
PROVISIONAL MANHOUR
SECTION
REMARKS
1
UNIT NAME
579
579
0
G
IN
SET
FIRST NO.
WORK STANDARD NO.
WORK NAME
WF MANHOUR
MANUAL MANHOUR
MACHINE MANHOUR
PROVISIONAL MANHOUR
SEC-TION
COMPONENT NAME
NODE NO.
PRE-VIOUS
1 1 9000000000000001E UNIT NAMEs1 579 579 0 0 INSIDE SET 1 0
1 2 9000000000000001E UNIT NAMEs2 54 54 0 0 INSIDE SET 2 1
1 3 9000000000000001E UNIT NAMEs3 10 10 0 0 INSIDE SET 3 2
1 4 9000000000000001E UNIT NAMEs4 50 50 0 0 INSIDE SET 4 3
5 9000000000000001E UNIT NAMEu1 63 63 0 0 INSIDE UNIT 5 4
27 9000000000000027E UNIT NAMEs23 55 55 0 0 INSIDE UNIT 27 26
28 9000000000000028E UNIT NAMEu24 88 88 0 0 INSIDE UNIT 28 27
29 9000000000000029E UNIT NAMEu25 147 147 0 0 INSIDE UNIT 29 4
30 900000000000002AE UNIT NAMEu26 52 52 0 0 INSIDE UNIT 30 29
31 900000000000002BE UNIT NAMEs27 55 55 0 0 INSIDE UNIT 31 30
32 900000000000002CE UNIT NAMEu28 203 203 0 0 INSIDE UNIT 32 28
33 900000000000002DE UNIT NAMEs29 66 66 0 0 INSIDE UNIT 33 32
34 900000000000002EE UNIT NAMEu30 36 36 0 0 INSIDE UNIT 34
THE NUMBER OF WORKS IN COMPOSITION : 141
TOTAL : 11903 (RU)
TOTAL MANHOUR IN COMPOSITION : 11903 (RU)
TOTAL MANHOUR OUTSIDE COMPOSITION: 0 (RU)
TOTAL MANHOUR OUTSIDE WORKSHOP: 0 (RU)
INPUT DATA
THE EXPECTED NUMBER OF PRODUCTS: 650 UNITS
THE NUMBER OF DEFECTIVE PRODUCT: 0 UNITS
THE NUMBER OF INITIAL PRODUCTS INVESTED INTO TOP OF ASSEMBLY LINE: 556 UNITS
WORKING TIME: 450 MIN-UTES
BREAK: 15 MIN-UTES
MORNING MEETING TIME: 1 MIN-UTES
EXERCISE TIME: 5 MIN-UTES
LINE STOP TIME: 0 MIN-UTES
OTHERS: 0 MIN-UTES
OPERABLE TIME: 429 MIN-UTES
EXPECTED COMPOSITION EFFICIENCY: 95 %
CALCULATE
OUTPUT DATA
STATION (ROUND DOWN) 18 St
COMPOSITION EFFICIENCY 100 %
STATION (ROUND UP) 19 St
COMPOSITION EFFICIENCY 95 %
THE NUMBER OF STATIONS 19 St
COMPOSITION EFFICIENCY 95 %
CALCULATION RESULT
THE NUMBER OF STATIONS: 18.9 St
PITCH TIME (tp) 660 RU
EXECUTE COMPOSITION
END
7710a
7710b
7710c
7710d
7720a
7720b
7720c
7720d
7707
7708
7709
7720
7730
77/97

FIG. 78

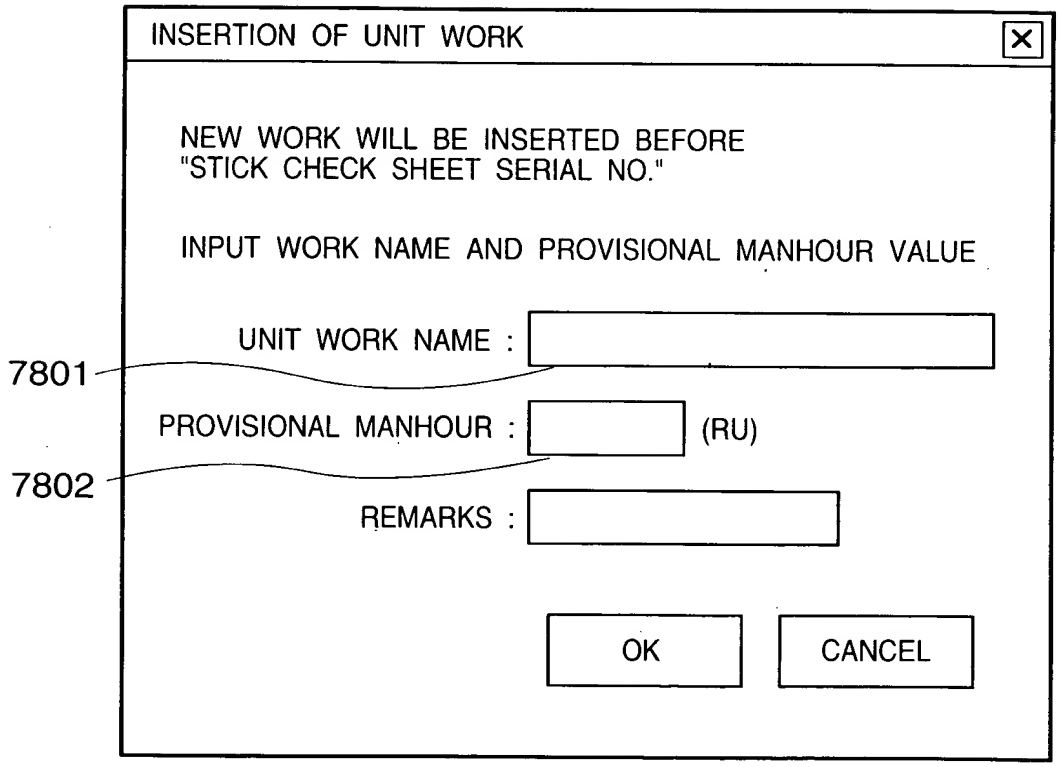

INSERTION OF UNIT WORK
NEW WORK WILL BE INSERTED BEFORE
"STICK CHECK SHEET SERIAL NO."
INPUT WORK NAME AND PROVISIONAL MANHOUR VALUE
UNIT WORK NAME :
7801
PROVISIONAL MANHOUR :
(RU)
7802
REMARKS :
OK
CANCEL

FIG. 79

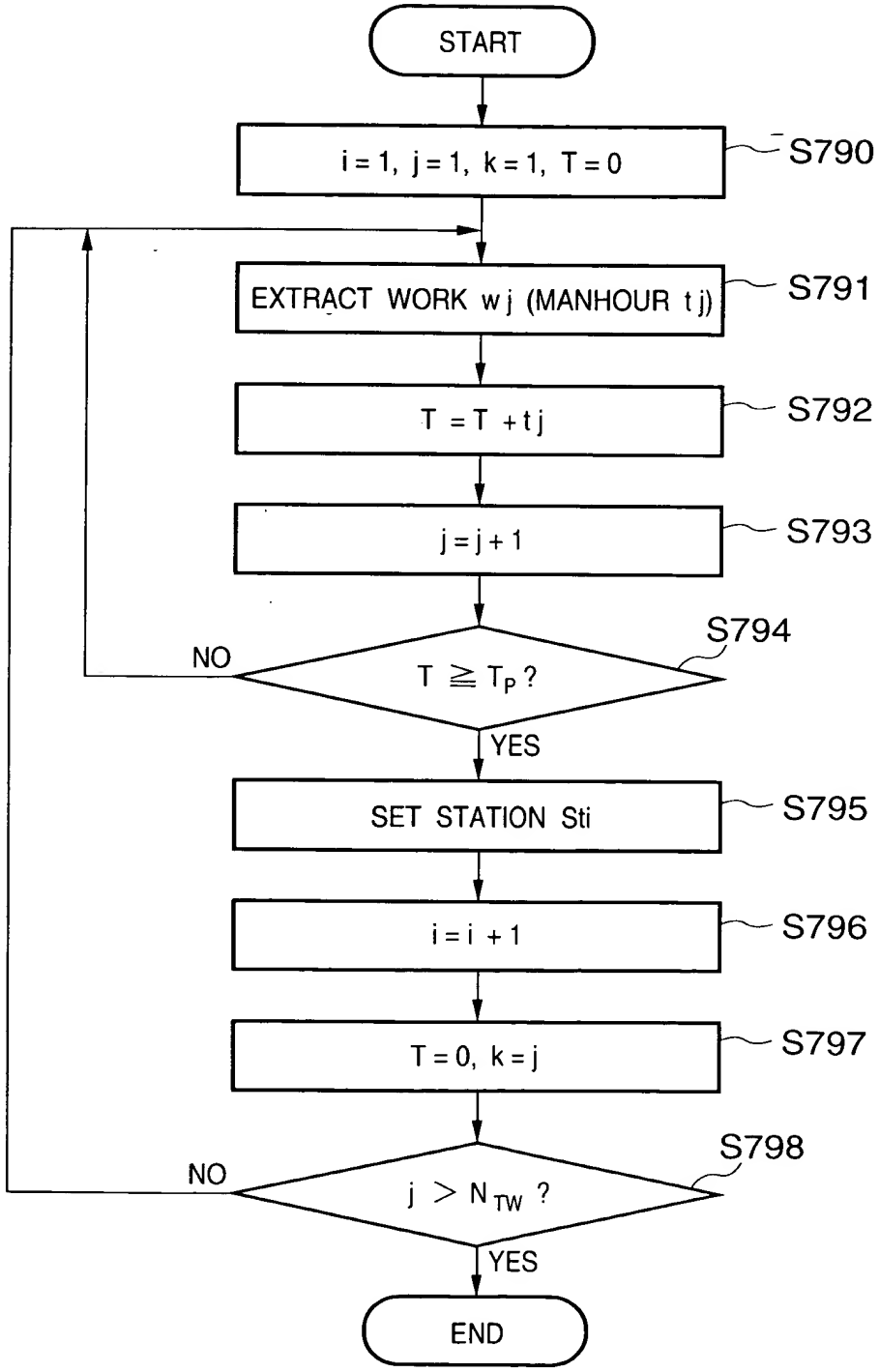

START
i = 1, j = 1, k = 1, T = 0
S790
EXTRACT WORK wj (MANHOUR tj)
S791
T = T + tj
S792
j = j + 1
S793
S794
NO
T ≧ TP ?
YES
SET STATION Sti
S795
i = i + 1
S796
T = 0, k = j
S797
S798
NO
j > NTW ?
YES
END

FIG. 80

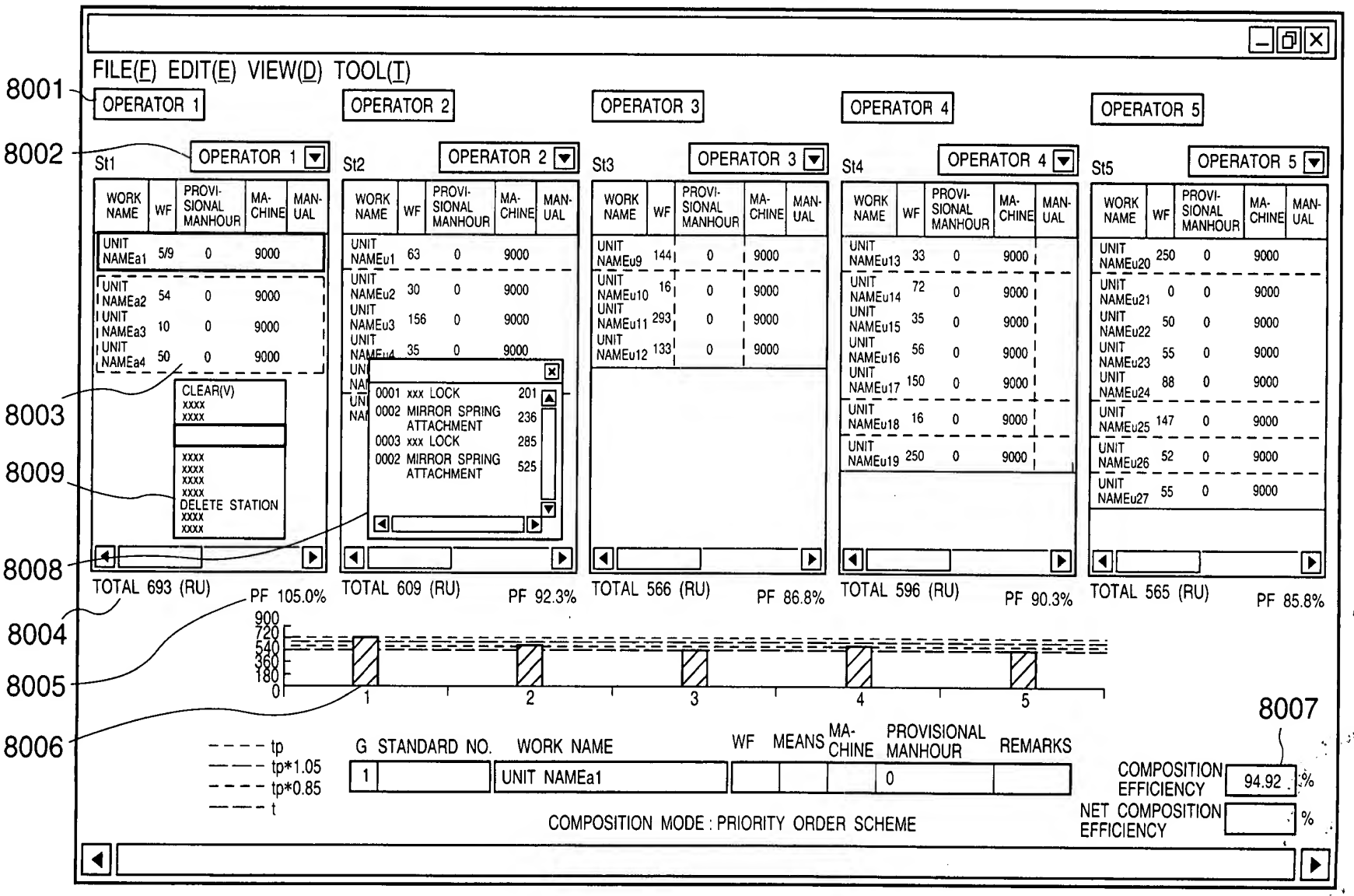

FILE(F) EDIT(E) VIEW(D) TOOL(T)
8001
OPERATOR 1
OPERATOR 2
OPERATOR 3
OPERATOR 4
OPERATOR 5
8002
St1
St2
St3
St4
St5
WORK NAME
WF
PROVISIONAL MANHOUR
MACHINE
MANUAL
UNIT NAMEa1 5/9 0 9000
UNIT NAMEa2 54 0 9000
UNIT NAMEa3 10 0 9000
UNIT NAMEa4 50 0 9000
UNIT NAMEu1 63 0 9000
UNIT NAMEu2 30 0 9000
UNIT NAMEu3 156 0 9000
UNIT NAMEu4 35 0 9000
UNIT NAMEu9 144 0 9000
UNIT NAMEu10 16 0 9000
UNIT NAMEu11 293 0 9000
UNIT NAMEu12 133 0 9000
UNIT NAMEu13 33 0 9000
UNIT NAMEu14 72 0 9000
UNIT NAMEu15 35 0 9000
UNIT NAMEu16 56 0 9000
UNIT NAMEu17 150 0 9000
UNIT NAMEu18 16 0 9000
UNIT NAMEu19 250 0 9000
UNIT NAMEu20 250 0 9000
UNIT NAMEu21 0 0 9000
UNIT NAMEu22 50 0 9000
UNIT NAMEu23 55 0 9000
UNIT NAMEu24 88 0 9000
UNIT NAMEu25 147 0 9000
UNIT NAMEu26 52 0 9000
UNIT NAMEu27 55 0 9000
8003
CLEAR(V)
xxxx
xxxx
8009
DELETE STATION
8008
0001 xxx LOCK 201
0002 MIRROR SPRING ATTACHMENT 236
0003 xxx LOCK 285
0002 MIRROR SPRING ATTACHMENT 525
TOTAL 693 (RU)
PF 105.0%
TOTAL 609 (RU)
PF 92.3%
TOTAL 566 (RU)
PF 86.8%
TOTAL 596 (RU)
PF 90.3%
TOTAL 565 (RU)
PF 85.8%
8004
8005
900
720
540
360
180
0
1
2
3
4
5
8006
tp
tp*1.05
tp*0.85
t
G STANDARD NO.
WORK NAME
WF
MEANS
MACHINE
PROVISIONAL MANHOUR
REMARKS
1
UNIT NAMEa1
0
8007
COMPOSITION EFFICIENCY
94.92
%
NET COMPOSITION EFFICIENCY
%
COMPOSITION MODE : PRIORITY ORDER SCHEME

FIG. 81

STATION 1

WORK NAME	MANHOUR
A1	10
A2	20
A3	12
A4	50

MANHOUR IN STATION = 92

STATION 2

WORK NAME	MANHOUR
B1	10
B2	25
B3	11
B4	8

MANHOUR IN STATION = 54

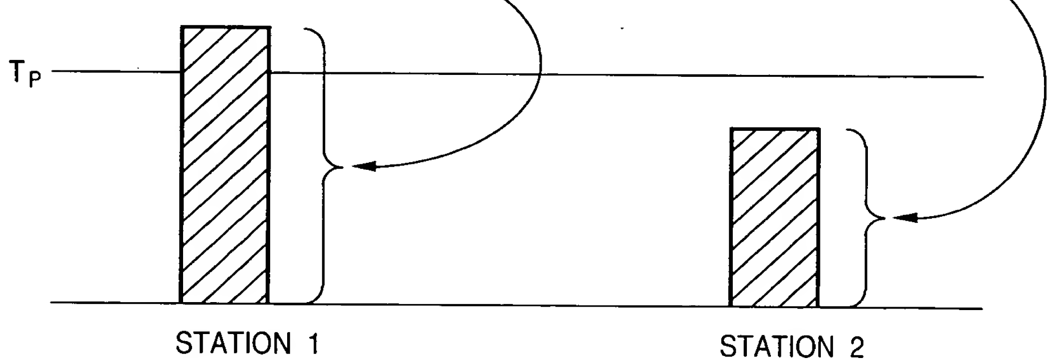


FIG. 82

STATION 1

WORK NAME	MANHOUR
A1	10
A2	20
A3	12
A4 - 1	25
A4 - 2	25

MANHOUR IN STATION = 92

STATION 2

WORK NAME	MANHOUR
B1	10
B2	25
B3	11
B4	8

MANHOUR IN STATION = 54

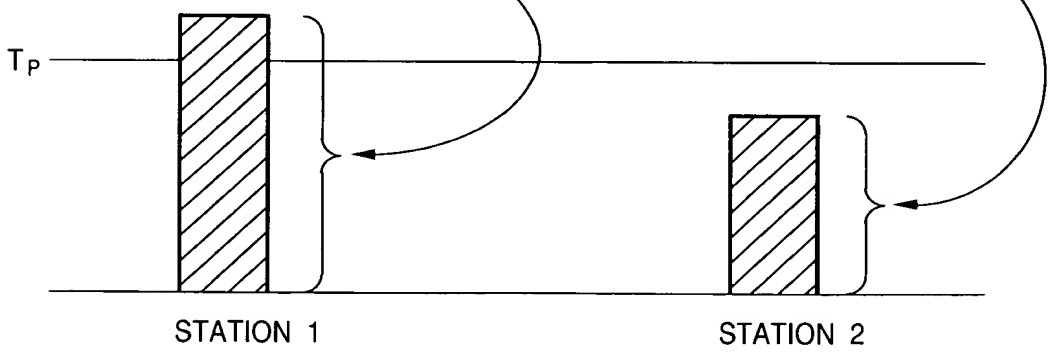


FIG. 83

STATION 1

WORK NAME	MANHOUR
A1	10
A2	20
A3	12
A4 - 1	25

MANHOUR IN STATION = 77

STATION 2

WORK NAME	MANHOUR
A4 - 2	25
B1	10
B2	25
B3	11

MANHOUR IN STATION = 79

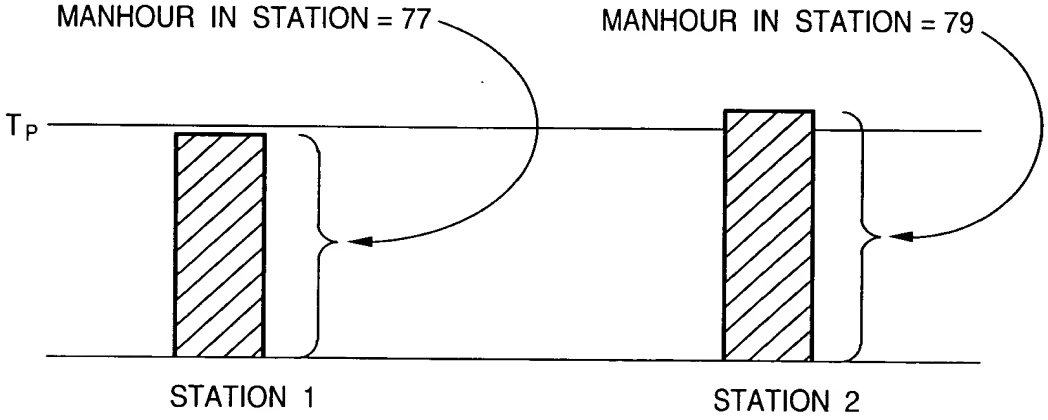


FIG. 84

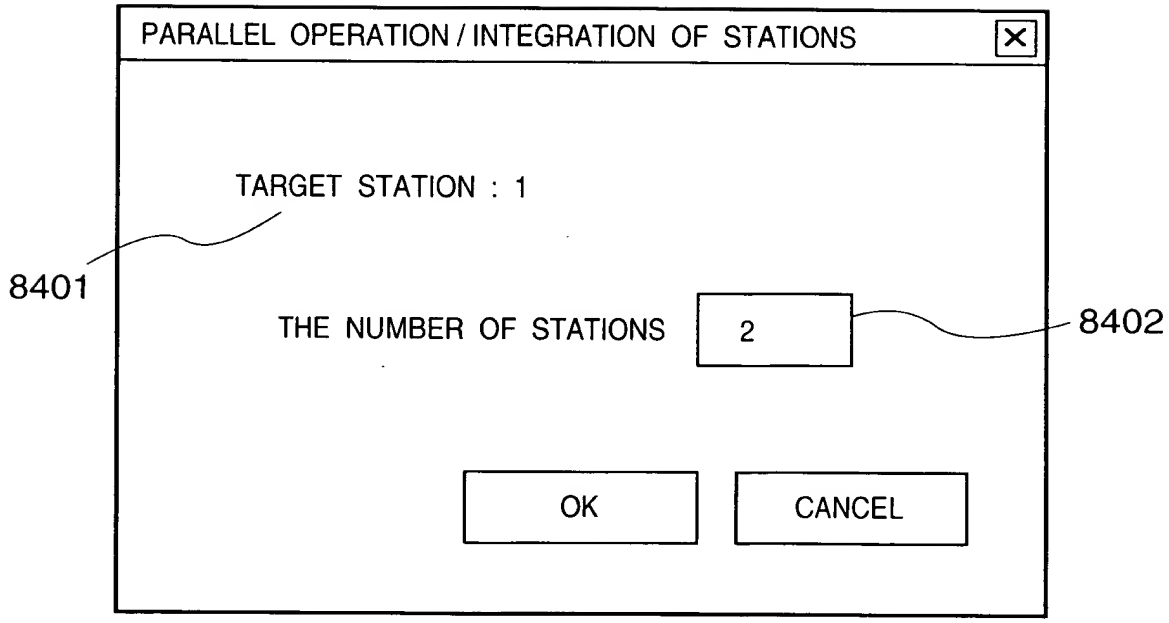

PARALLEL OPERATION / INTEGRATION OF STATIONS
TARGET STATION : 1
8401
THE NUMBER OF STATIONS
2
8402
OK
CANCEL

FIG. 85

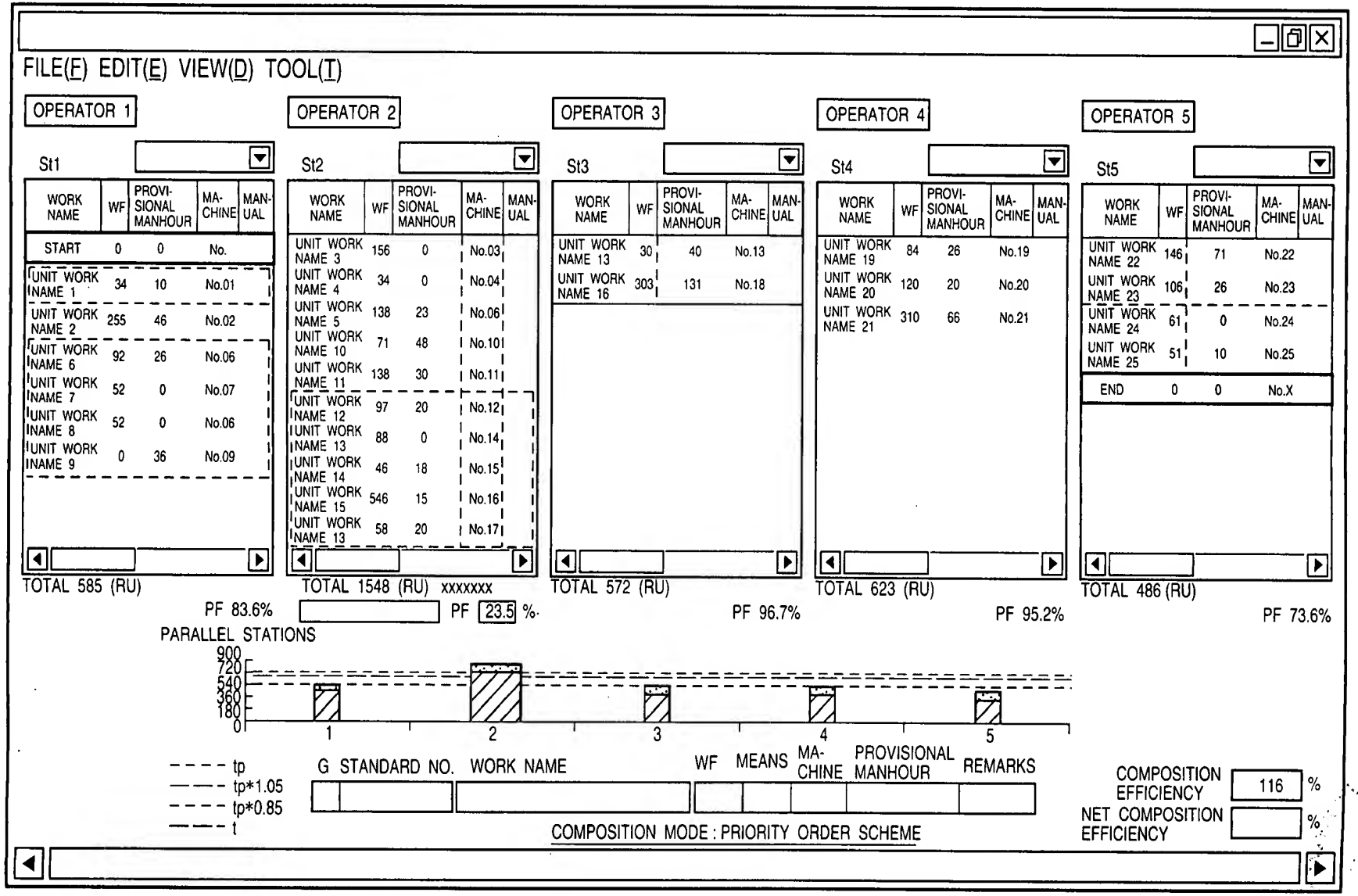

FILE(F) EDIT(E) VIEW(D) TOOL(T)
OPERATOR 1
OPERATOR 2
OPERATOR 3
OPERATOR 4
OPERATOR 5
St1
St2
St3
St4
St5
WORK NAME
WF
PROVISIONAL MANHOUR
MACHINE
MANUAL
START 0 0 No.
UNIT WORK NAME 1 34 10 No.01
UNIT WORK NAME 2 255 46 No.02
UNIT WORK NAME 6 92 26 No.06
UNIT WORK NAME 7 52 0 No.07
UNIT WORK NAME 8 52 0 No.06
UNIT WORK NAME 9 0 36 No.09
UNIT WORK NAME 3 156 0 No.03
UNIT WORK NAME 4 34 0 No.04
UNIT WORK NAME 5 138 23 No.06
UNIT WORK NAME 10 71 48 No.10
UNIT WORK NAME 11 138 30 No.11
UNIT WORK NAME 12 97 20 No.12
UNIT WORK NAME 13 88 0 No.14
UNIT WORK NAME 14 46 18 No.15
UNIT WORK NAME 15 546 15 No.16
UNIT WORK NAME 13 58 20 No.17
UNIT WORK NAME 13 30 40 No.13
UNIT WORK NAME 16 303 131 No.18
UNIT WORK NAME 19 84 26 No.19
UNIT WORK NAME 20 120 20 No.20
UNIT WORK NAME 21 310 66 No.21
UNIT WORK NAME 22 146 71 No.22
UNIT WORK NAME 23 106 26 No.23
UNIT WORK NAME 24 61 0 No.24
UNIT WORK NAME 25 51 10 No.25
END 0 0 No.X
TOTAL 585 (RU)
TOTAL 1548 (RU) xxxxxxx
TOTAL 572 (RU)
TOTAL 623 (RU)
TOTAL 486 (RU)
PF 83.6%
PF 23.5 %
PF 96.7%
PF 95.2%
PF 73.6%
PARALLEL STATIONS
900
720
540
360
180
0
1
2
3
4
5
tp
tp*1.05
tp*0.85
t
G STANDARD NO.
WORK NAME
WF
MEANS
MACHINE
PROVISIONAL MANHOUR
REMARKS
COMPOSITION EFFICIENCY
116 %
NET COMPOSITION EFFICIENCY
%
COMPOSITION MODE : PRIORITY ORDER SCHEME

FIG. 86

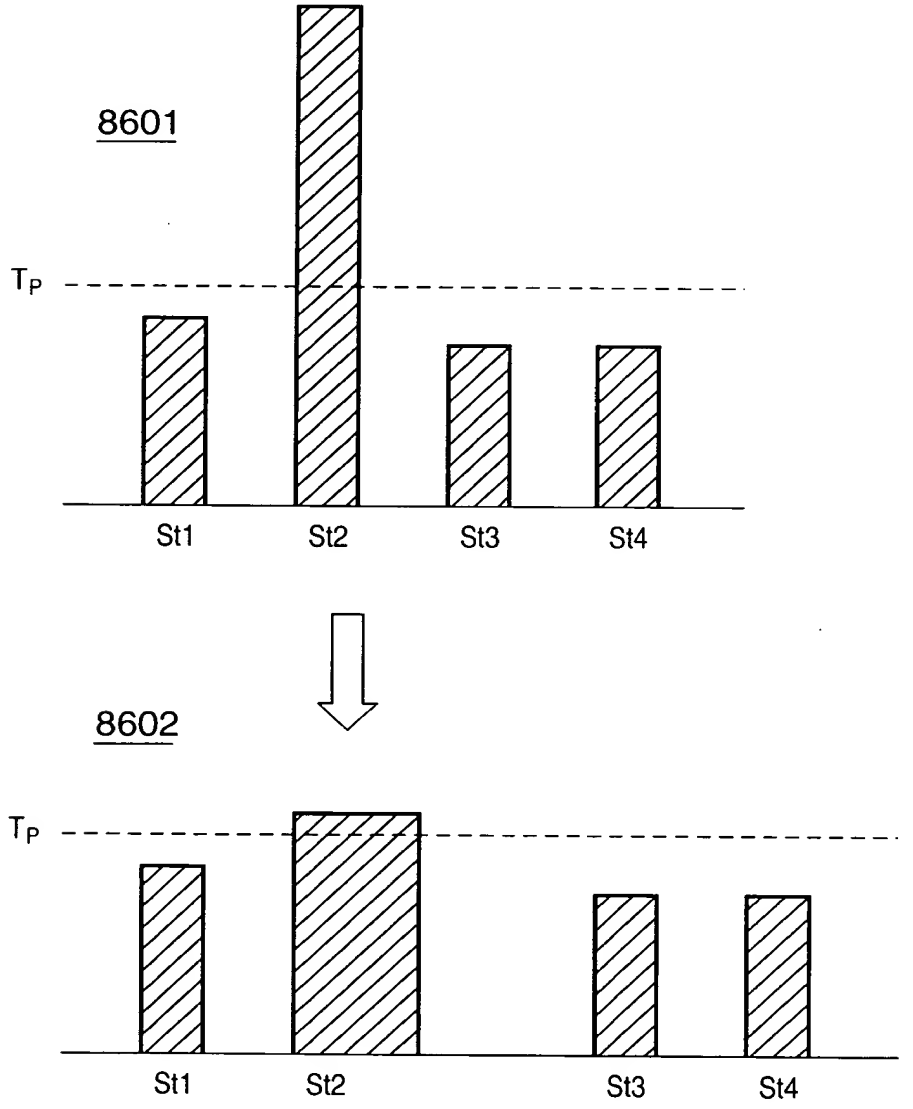


FIG. 87

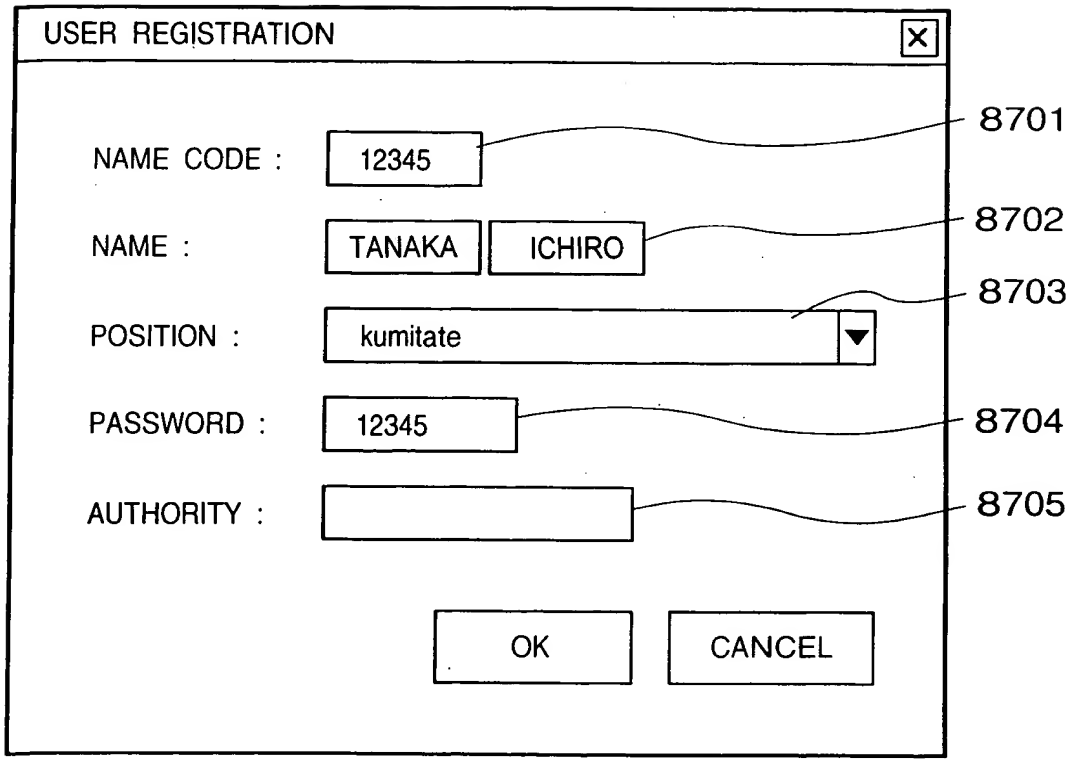

USER REGISTRATION
NAME CODE :
12345
NAME :
TANAKA
ICHIRO
POSITION :
kumitate
PASSWORD :
12345
AUTHORITY :
OK
CANCEL
8701
8702
8703
8704
8705

FIG. 88

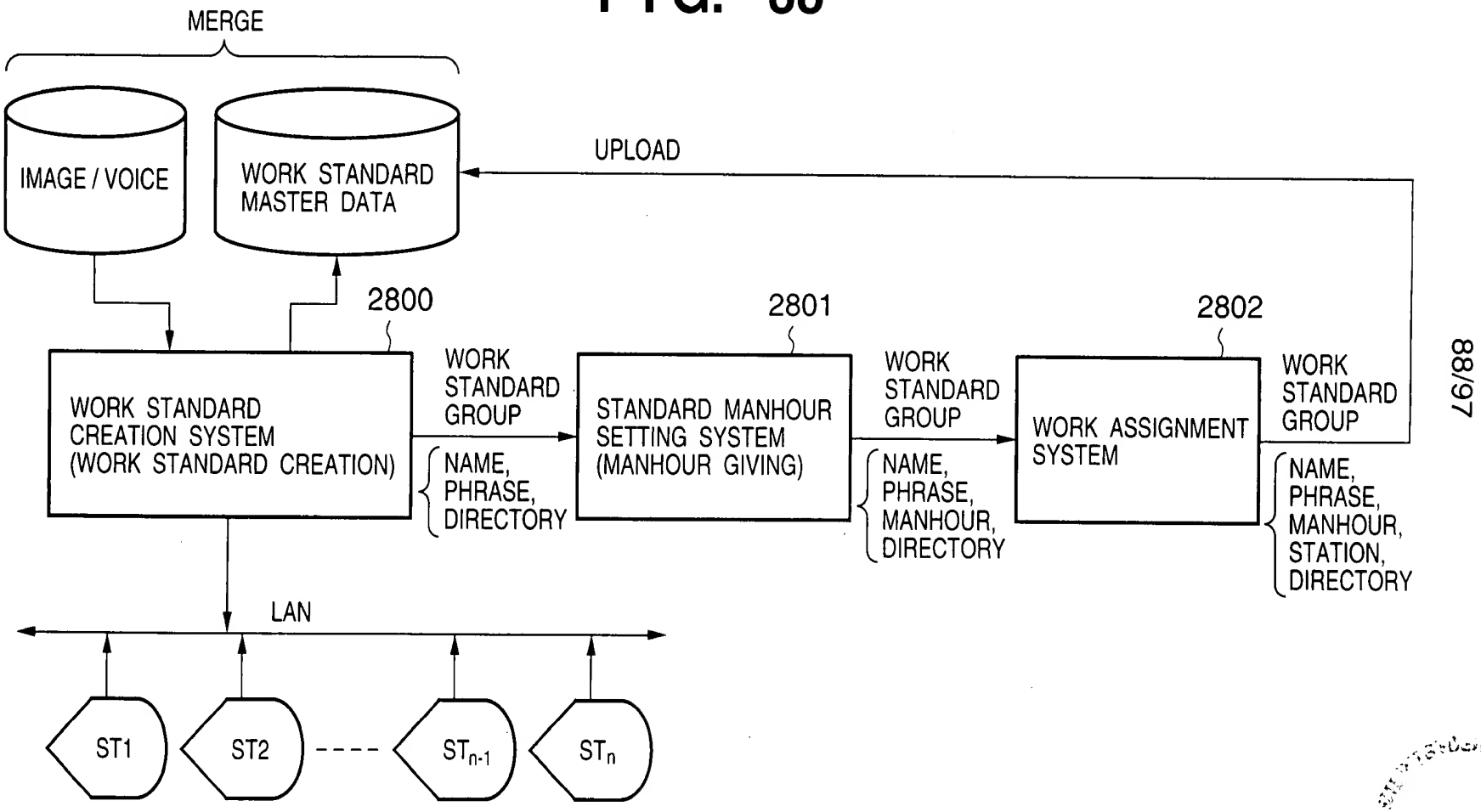


FIG. 89

DIRECTORY NAME	IMAGE DATA	OPERATION (VERB)	PARAMETER 1	PARAMETER 2	PARAMETER 3
xxxxxx1	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 10mm	TORQUE 10Kg.M
xxxxxx2	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 20mm	TORQUE 20Kg.M
xxxxxx3	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 20mm	TORQUE 30Kg.M
...	...	...	...	...	...
yyyyyy1	ROTATE	ROTATE	CLOCKWISE	DISTANCE MOVEMENT 20mm	
yyyyyy2	ROTATE	ROTATE	COUNTERCLOCKWISE	DISTANCE MOVEMENT 20mm	
...	...	...	...	...	...
zzzzzz1	OPEN	OPEN	OPEN UPWARD	DISTANCE MOVEMENT 30mm	WEIGHT 100g
zzzzzz2	OPEN	OPEN	OPEN DOWNWARD	DISTANCE MOVEMENT 40mm	WEIGHT 200g
...	...	...	...	...	...

FIG. 90

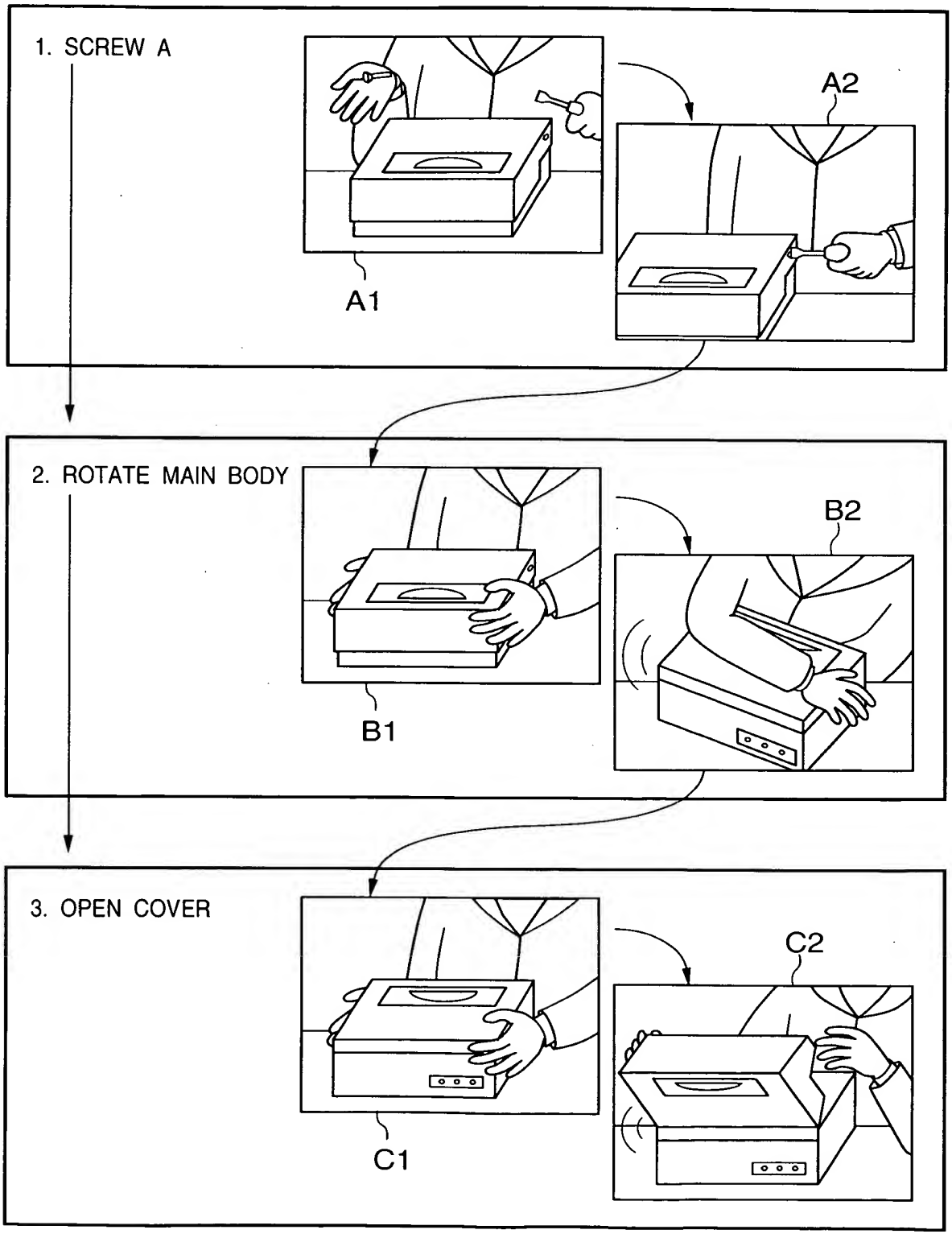


FIG. 91

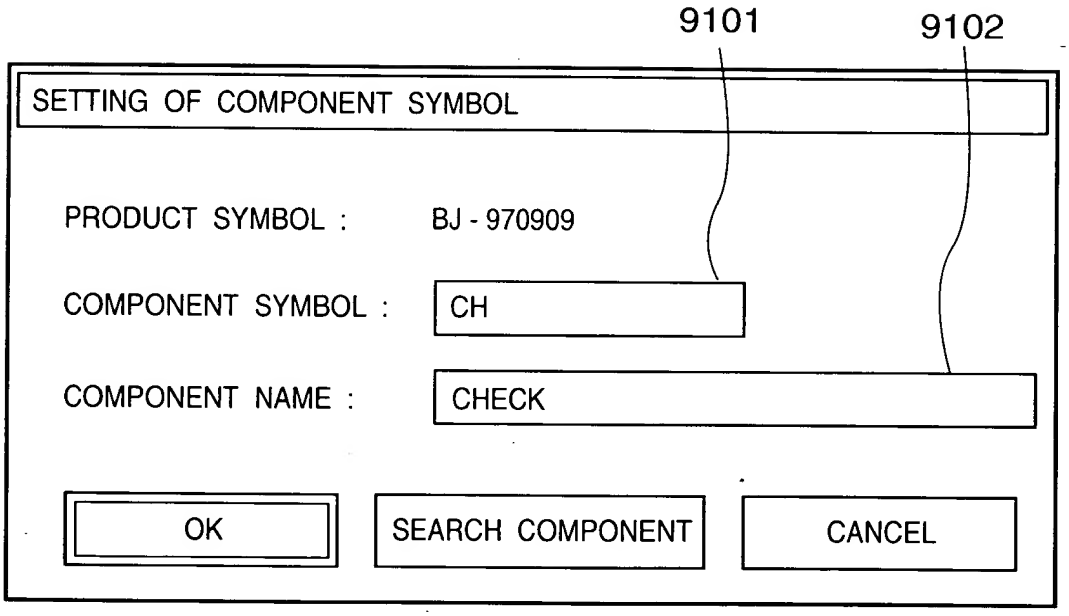

9101
9102
SETTING OF COMPONENT SYMBOL
PRODUCT SYMBOL :
BJ - 970909
COMPONENT SYMBOL :
CH
COMPONENT NAME :
CHECK
OK
SEARCH COMPONENT
CANCEL

FIG. 92

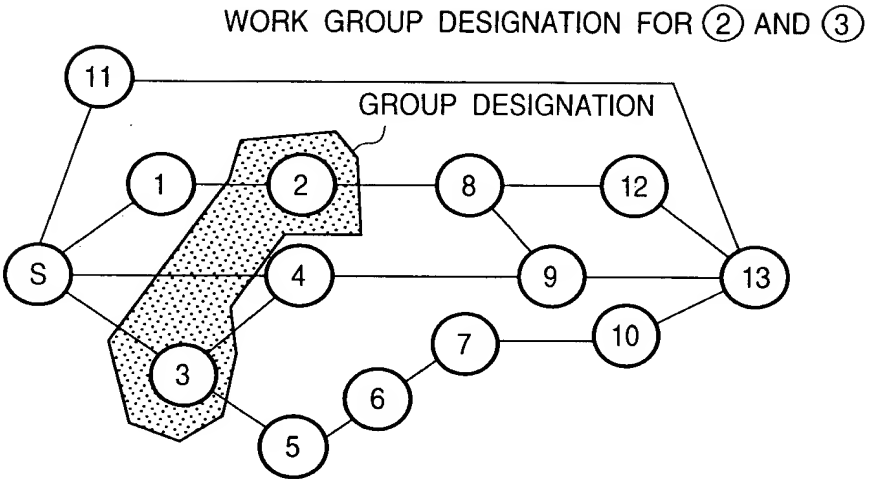

WORK GROUP DESIGNATION FOR ② AND ③
GROUP DESIGNATION
11
1
2
8
12
S
4
9
13
7
10
3
6
5

FIG. 93

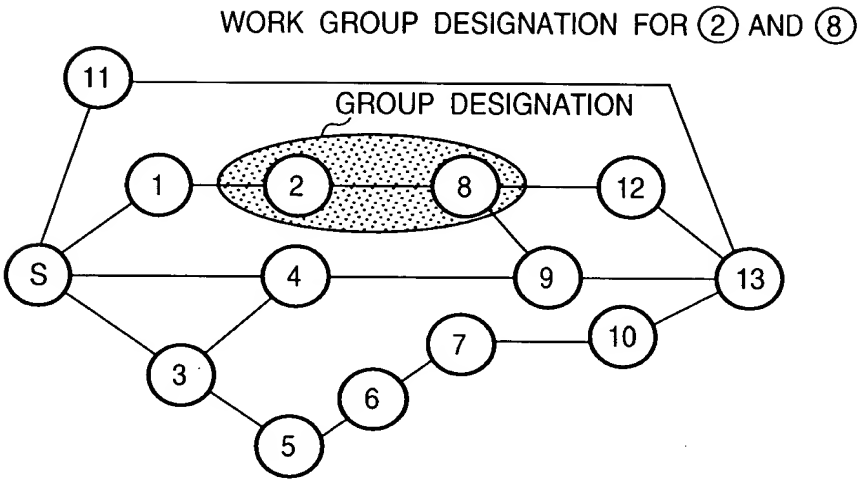

WORK GROUP DESIGNATION FOR ② AND ⑧
GROUP DESIGNATION
11
1
2
8
12
S
4
9
13
7
10
3
6
5

FIG. 94

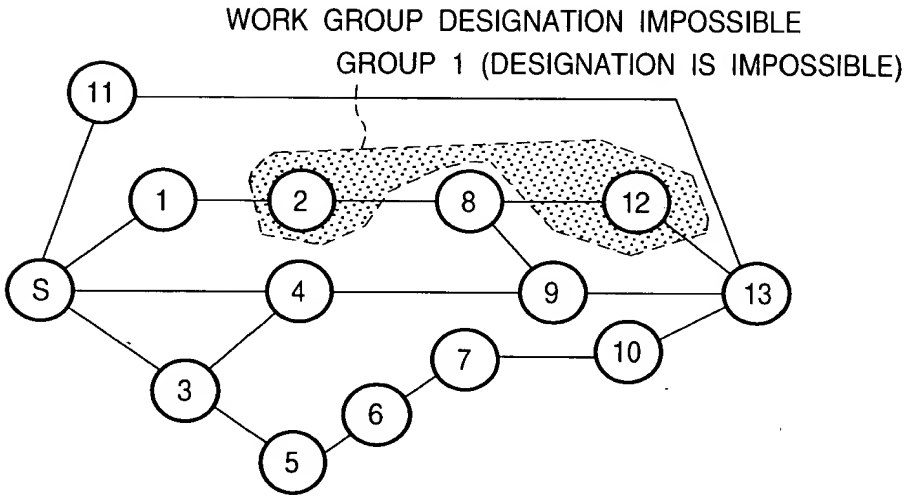
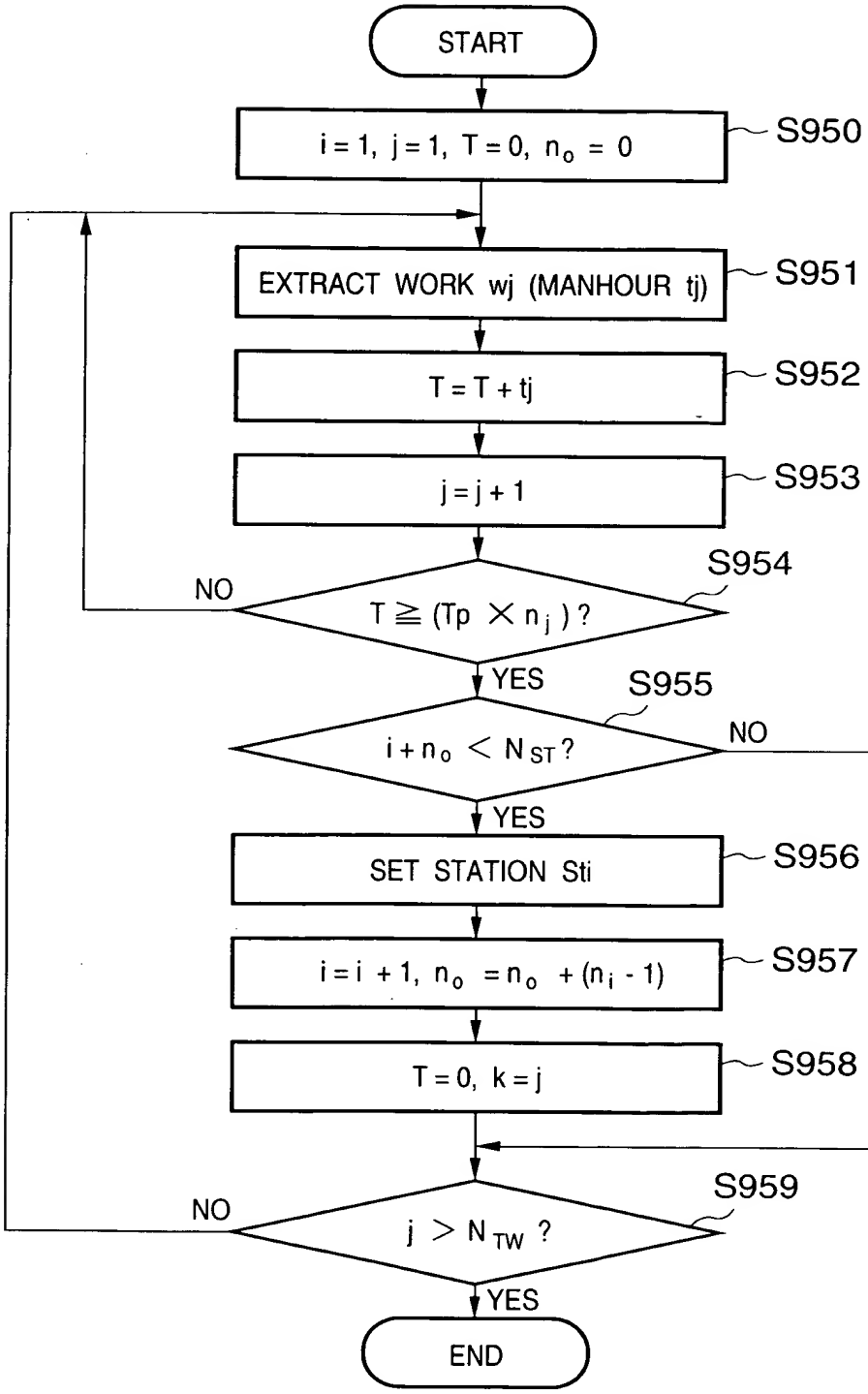
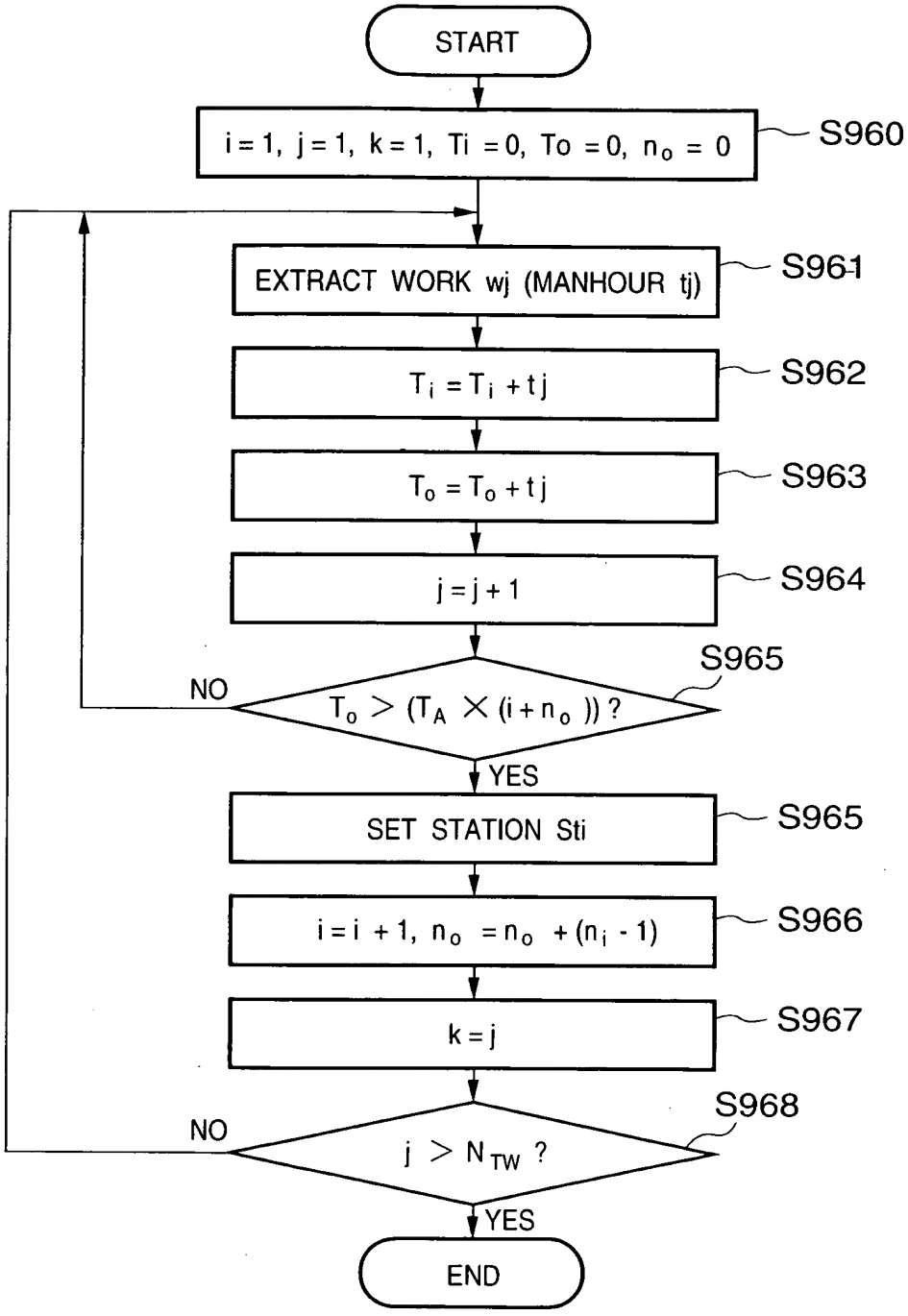

WORK GROUP DESIGNATION IMPOSSIBLE
GROUP 1 (DESIGNATION IS IMPOSSIBLE)
11
1
2
8
12
S
4
9
13
3
7
10
6
5

FIG. 95



N_{ST}: THE NUMBER OF STATIONS
n_i : i STATION PARALLEL NUMBER
n_o : TOTAL ACCUMULATED PARALLEL SUM NUMBER

FIG. 96



N_{ST}: THE NUMBER OF STATIONS
T_i : i STATION MANHOUR
TA : STATION MANHOUR AVERAGE VALUE
$T_A = WF / N_{ST}$
To : TOTAL ACCUMULATED MANHOUR
n_i : i STATION PARALLEL NUMBER
n_o : TOTAL ACCUMULATED PARALLEL SUM NUMBER

FIG. 97